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

Global Journal

of Management and Business Research: B

Economics and Commerce



Role of Micro Finance

Effect of Front-End Uncertainty

Highlights

Print and Publish Complex

Preparation of Human Resources

Discovering Thoughts, Inventing Future

VOLUME 17 ISSUE 2 VERSION 1.0

© 2001-2017 by Global Journal of Management and Business Research, USA

Volume 17 Issue 10 was originally issued as B2

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

Volume 17 Issue 10
Originally issued as B2

Global Journal of Management and Business Research: B

Economics and Commerce

Volume 17 Issue 2 (Ver. 1.0)

Open Association of Research Society

© Global Journal of Management and Business Research. 2017.

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

Find a correspondence nodal officer near you

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

eContacts

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

Pricing (Including by Air Parcel Charges):

For Authors:
22 USD (B/W) & 50 USD (Color)
Yearly Subscription (Personal & Institutional):
200 USD (B/W) & 250 USD (Color)

Editorial Board

Global Journal of 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)
Web: quinnipiac.edu/x1606.xml?

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. Role of Micro Finance in Poverty Alleviation of Tribals of Nilagiri ITDA of Balasore, Odisha, India. *1-11*
2. Effet Combine Des Financements Exterieurs Sur La Croissance Economique En Afrique Subsaharienne. *13-24*
3. Problems of Education and Preparation of Human Resources for Print and Publish Complex in the Conditions of the Central European Region. *25-34*
4. Front-End Activities Promote Front-End Performance?—The Moderating Effect of Front-End Uncertainty. *35-47*
5. Impact Du Commerce Exterieur Sur L'efficacite De L'aide Publique Au Developpement: Cas Du Cameroun. *49-57*

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

Global Journal of Management and Business Research: B
Economics and Commerce
Volume 17 Issue 2 Version 1.0 Year 2017
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Role of Micro Finance in Poverty Alleviation of Tribals of Nilagiri ITDA of Balasore, Odisha, India

By Damayanti Pradhan, Dr. Parsuram Biswal & Dr. Priti Ranjan Hathy

Abstract- Microfinance is a source of financial services for entrepreneurs and small businesses lacking access to banking and related services. Micro finance is emerging as a powerful instrument for poverty alleviation in the new economy. Beyond the direct linked with poverty reduction, it is an indirect link to address the issues of health, education and gender. Micro finance cover not only consumption and production loans, but will also include other credit needs such as housing and shelter improvements.

Keywords: national agricultural bank for rural development (NABARD), self help group (SHG), analysis of variance (ANOVA), alpha (cronbach).

GJMBR-B Classification: JEL Code: F65



Strictly as per the compliance and regulations of:

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

Role of Micro Finance in Poverty Alleviation of Tribals of Nilagiri ITDA of Balasore, Odisha, India

Damayanti Pradhan [α], Dr. Parsuram Biswal [σ] & Dr. Priti Ranjan Hathy [ρ]

Abstract- **Microfinance is a source of financial services for entrepreneurs and small businesses lacking access to banking and related services. Micro finance is emerging as a powerful instrument for poverty alleviation in the new economy. Beyond the direct linked with poverty reduction, it is an indirect link to address the issues of health, education and gender. Micro finance cover not only consumption and production loans, but will also include other credit needs such as housing and shelter improvements.**

Keywords: national agricultural bank for rural development (NABARD), self help group (SHG), analysis of variance (ANOVA), alpha (cronbach).

I. Introduction

Indian microfinance sector is expected to grow nearly ten times by 2011 to a size of about Rs250 billion from the current market size of Rs27 billion, at a compounded annual growth rate of 76%. Microfinance in India started evolving in the early 1980s with the formation of informal Self Help Group (SHG) for providing access to financial services to the needy people who are deprived of credit facilities. National Bank for Agriculture and Rural Development, the regulator for microfinance sector, and Small Industries Development Bank of India are devoting their financial resources and time towards the development of microfinance.

a) Significance of the Study

The world has recognized the gravity of the rural indebtness in developing and underdeveloped countries and a consensus emerged for designing and implementing poverty alleviation schemes in such a manner that the poor would be encouraged to take loans for productive economic activities of their own. The poor in these countries are encouraged to form small groups of people having relatively equal economic status where mutual thrift and credit activities are initiative for meeting their emerging credit needs. As part of poverty alleviation measures, the Government of India has implemented self-employment programmes like Swarnajayanti Gram Swarojagar Yojana, where the measure emphasis is laid on Self-Help Groups formation, social mobilization and economic activation through micro credit finance.

Author α: Lecturer, Nilgiri College, Balasore, Odisha. e-mail: damayanti.198651@yahoo.com
Author σ: Principal, Fakir Mohan Autonomous College, Balasore-756001. e-mail: pbiswal.contfmu@gmail.com
Author ρ: Lecturer in Computer Science, Government Polytechnic, Nayagarh Odisha. e-mail: drresearch2007@gmail.com

b) Motivation of the Paper

Tribals constitute about 8.6% of the total population in India. The tribals in India are predominantly rural living in mostly in forests and mountains somewhat isolated from the general population, are overwhelmingly illiterate and more than 50% population live below the poverty line. Though the welfare and development of tribals has been given a very propriety right from the beginning of the first five year plan but still it remains the most backward ethnic group in India on the three most important indicators of development, i.e. health, education and income.

The National Commission review on the working of the Constitution (May, 2001) clearly indicates that a lot needs to be done for further development and welfare of tribals. The overall development of tribals of the society should include their empowerment through Self-Help Groups in educational, social, economic and political sectors while keeping in view of their culture, heritage and traditional identity in terms of age-old rights and privileges of this people along with maintaining harmonious relationship of social and economic development in line with all other sections of the society.

This proposed study will be directed to study the efficiency of the Micro Finance provision to solve the specific peculiar problem of the Tribal people.

The scheduled areas in the states of Orissa comprises of the districts of Mayurbhanj, Sundargarh and Koraput, KuchindaTahasil of Sambalpur, Telkoi, Keonjhar, Champua and Barbil Tahasil of Keonjhar district. Kandhamal, Baliguda and Ghumusar, Udayagiri Tahasil of Phulbani district, R. Udayagiri tahasil, Gumma Block and Rayagada Block, SurudaTahasil, Thuamul Rampur Block and Langigarh Block of Kalahandi district and Nilgiri Block of Balasore district.

Scheduled Caste and Scheduled Tribe population in the state as per 2001 census comes to 60.82 lakhs and 81.45 lakh respectively which is 16.5% and 21.1% of the total population of the state as against 16.2% and 22.2% in the previous census i.e. 1991. The decennial growth of SC and ST population during 1991-01 is 18.6% and 15.8% respectively. Similarly as per

© 2017 Global Journals Inc. (US)

2001 census the sex ratio among SC and ST people is 979 and 1003 respectively as against 936 and 978 at the national level.

Therefore there is ample scope to study the impact of micro finance in the tribal society for the socio-economic development of tribal people. The outcome which is observed in case of non-tribal people and society cannot be generalized for tribal society. Hence an attempt has been made through study to evaluate the Role of Micro Finance in Poverty Alleviation of Nilagiri ITDA block of Balasore district, so as to analyze the relevance and suitability of micro-finance system in tribal society.

c) Objective of the study

The present study is an attempt to analyze the growth and role of micro finance in developing the socio-economic profile of the tribals in Nilgiri ITDA Block of Balasore district in Orissa. The specific objectives of the study are as follows:

a) To examine the role of micro finance in the socio-economic development of tribal's.

b) To assess whether the micro finance system is capable of raising the productivity level of the beneficiary families in the field of agriculture, horticulture, animal husbandry, small industry and allied activities.

d) Scope of the study

The proposed study as purely analytical and empirical in character is based on both primary and secondary data. Besides descriptive survey method can also be adopted for the study. As the targeted area is confined to Nilagiri ITDA block of district Balasore in Odisha which are covered under the study to explain the micro-finance system in tribal society residing in those areas.

Niilgiri ITDA Block comprises of 25 nos of Gram Panchayats (149 nos of villages including hamlets) having population of 1,29,360 (Male-64,713 ,Female-64647) in 31,679 nos of house holdings. All most all the G.Ps are covering with schedule tribe population .Out of the total population 74,701 (Male-36839, Female-37862) are schedule tribe population in 14763 nos of house holds

Out of that, 10 villages @ 30 nos families from each village are taken for sampling of the study on the bais of socio economic status which are financed by different commercial banks, co-operative banks and other sources for their different activities such as Agriculture, Horticulture, Goatery, Poultry ,Stone carving, Rice husking and Khali stichin etc. These activities are their sources of income generating purposes.

Sample Villages

Village	G.P	House hold	Popu-lation	Male	Female	ST House hold	ST Population	Male	Female	% of ST literacy
Kaduani	Chatrapur	276	1146	600	546	87	711	406	305	51.9
Khuntadiha	Chjatrapur	100	381	194	187	59	178	106	72	49.9
Parasipal	Chatrapur	98	384	196	188	51	171	97	94	53.8
Madhupuria	Chatrapur	91	332	169	163	60	150	94	56	54
Kishore ch.pur	KCPur	283	1206	629	597	198	646	389	257	46.8
Kathagochhi	Mahisapat	317	1363	672	691	191	1061	513	548	41.6
Mahisapata	Mahisapat	385	1673	814	859	222	1479	710	769	43.7
Tentulia	Tentulia	364	1304	663	641	111	638	317	321	47.4
Arbandh	Arbandh	376	1586	788	798	188	965	491	474	43.2
Pithahata	Pithahata	452	1642	834	808	152	762	389	373	47.3
Total		2742	11037	5559	5478	1319	7061	3516	3545	

Source: Census, 2011

Nilgiri is a backward hilly region in Balasore district, predominantly inhabited by aboriginal people. Nilgiri is the only ITDA Block of Balasore district which is densely populated by tribal people. Hence the purposive sampling method can be justified to fulfill the aims and objectives of the research study.

e) Hypothesis for the Study

The study is carried out with the following hypothesis:

1. Is there a positive relationship between Micro-credit and improved living standards of recipient of these micro credits in the study area?
2. Are low income earners able to obtain credit easily from the Government owned micro finance institutions in the study area?

II. Classification and Sources of Data

The traditional classification of data for an empirical study like this has been be followed in this section. Both secondary and primary data sources have been used for data collection. The most important limitation to this paper is the data gap.

© 2017 Global Journals Inc. (US)

It is in fact the reason why a general theoretical approach has been developed for this study. The fact that a field research cannot be conducted reduces the whole exercise to developing a paper proposal for the actual research phase in Nilagiri ITDA Block of Balasore. During the same period, the total expenditure of Nilgiri ITDA under SCA to TSP as well as Article 275(i) was Rs.484.62 lakh (95.76%) while the expenditure under SCA to TSP was exceeded the allotment, the expenditure under Article 275(i) was Rs.155.25 lakh (84.89%).

Allotment and Expenditure of Nilgiri ITDA from 2010-11 to 2015-16

Sl.No	For the Year	Allotment received in Rupees	Allotment Expenditure in Rupees
1	2010-11	87,16,000/-	86,58,554/-
2	2011-12	79,85,850/-	81,09,350/-
3	2012-13	92,37,000/-	90,29,650/-
4	2013-14	105,08,800/-	1,11,06,755/-
5.	2014-15	126,83,302/-	168,12,133/-
6.	2015-16	98,74,000/-	1.12,23,009/-

Source: ITDA Nilgiri , 2017

This section therefore discusses formulation of the research framework, that is, how data collection and analysis for the actual paper writing on this subject are conducted.

a) Growth of Micro Credit Institutions

A pilot project for purveying micro credit by linking Self Help Groups (SHGs) with banks was launched by NABARD in 1991. Its view was facilitating smoother and more meaningful banking with the poor. RBI had been advancing commercial bank to actively participate in this linkage programme. The scheme has since been extended to RRBs and cooperative banks. The running of SHG is also a great lesson in governance. It teaches the value of discipline both procedural and financial, well run SHGs are subject to external audits that enforce prudence.

III. Demographic Profile of Study Area (Nilagiri itda of Balasore, Odisha)

Balasore district is one out of the thirty districts of Qdisha. This is the district having interacted with different compositions of population, different culture and confluence of sea, land, horizon of rail road and facility of strong transport system. As the History says Balasore is composed of Bala-E-Shore. It means a city on the coast of the sea. This has been a place of prime importance since the British rule. The district is also famous for defence base and fishing business.

Financial Institutions: A number of commercial banks and co-operative institutions are working in the district, which mobilizes saving and advance loans to different people. There are 71 branches of different commercial banks, 45 branches of Gramya Banks, 136 numbers of co-operative societies and 39 number of non–agricultural multipurpose co-operative societies operate in this district to cater to the needs of the people of the district.

a) Integrated Tribal Development Agency, Nilgiri

Nilgiri Integrated Tribal Development Project (Now ITDA since 1979) was launched on 1st December 1975. It was registered bearing No.15081 under the Society Registration Act of 1860. It has been operating as an Autonomous body since 1979 for the all-round development of ST people and the area.

b) Demographic Profile

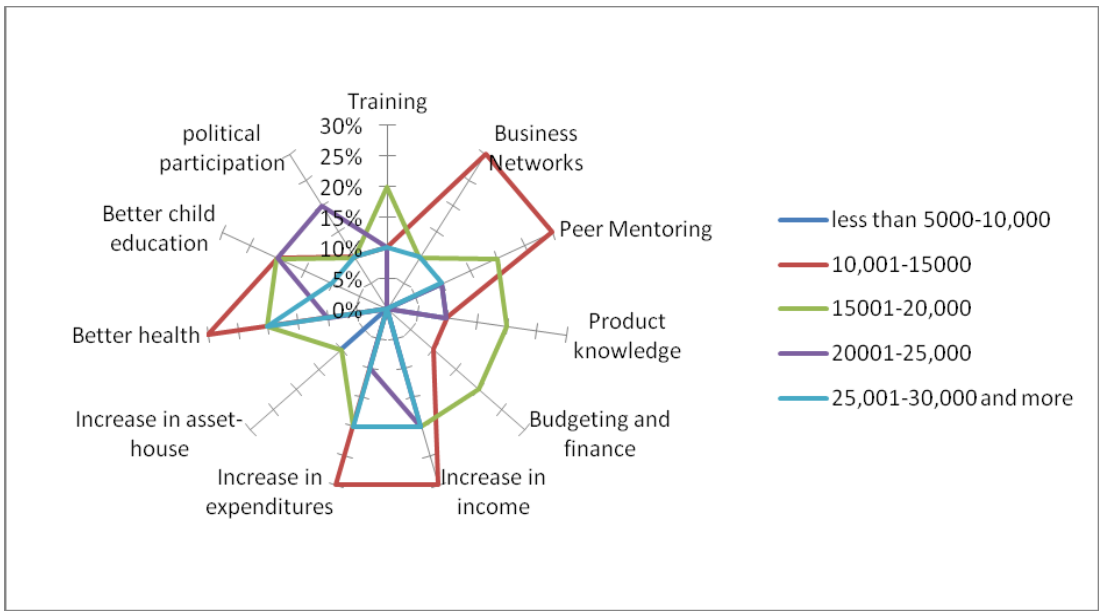
As per 2011 census, the total household and population of Nilgiri ITDA are 31679 (including 18319 households) and 1,29,360 respectively. Out of the total population, 64,713 are males and 64647are females. These ratio is 969 in total (ST-990, SC-977).The density of population is447 persons per square kilometres. The average population on size per village is 800 and household size is6.Out of the total population; 12761 persons (9.48%) are SC and 74701 persons (56.16%)are ST.As regards population growth during 1991-2001,the ST with 21.58% population growth is slightly more than the population growth of SC (18.46%) and all communities (14.42%). Over a period of three decades (1971-2001) the proportion of ST population of the ITDA has been increased by 2.93%, which shows a positive impact of socio-economic development intervention by the ITDA for ST people. The infant mortality rate of the area during 2003-04 was 48,6%.The sex ratio of STs in the area as per 2011 census is 990 females followed by SCs (977) and all communities (969).

Nilgiri ITDA area indicates arise in literacy rate of total population by 12.71% over the decade 1991-2001. As per 2001 census, the general literacy rate is estimated at 56.60% as against 43.89% in 1991. The males with 43.89% literacy rate are much ahead of the literacy rate of 26.31% by their female counterpart. Though there is arise of literacy of ST from 15.60% in 1971 to 22046% in 1991, still they are educationally logging for behind the total population and SC population. The ST female literacy is extremely low, lessthan10%.

© 2017 Global Journals Inc. (US)

The main work force in Nilgiri ITDA area comprises 32% of its total population 77% of it depend on Agro based economy. The cultivators from 34.16% of the workforce, agricultural labourers comprise 41.44% and 1.12% earn their livelihood from allied agricultural activities like livestock forest and fisheries.

Impact of increase in amount of microfinance on poverty reduction and entrepreneurship attributes



IV. Research Methodology

The goal of the research process is to produce new knowledge or deepen understanding of a topic or issue. The Quantitative data collection methods rely on random sampling and structured data collection instruments that fit. Comparative and experimental methods of analysis are also adopted by taking interviews of various persons associated with the study. Data will be tested and analyzed through the computer based statistical techniques like, Mean, Standard Deviation and Coefficient of Variation (C.V.), Correlation Coefficient between indicators in the study area is applied to examine the result.

1. Statistical tools like Coefficient Variation, t-test to know the significant of data.
2. Correlation coefficient for the sake of factor analysis.
3. Multiple correlation for establishing degree of relationship between variables.
4. Multiple Regression analysis for inferring directional relationship if any.
5. Chi-square ($\chi 2$) test is used for hypothesis testing.
6. Two-way ANOVA i.e. Analysis of Variance tests are adopted for analysis for measuring the different from various angles between the factors.
7. Factor analysis for finding out the magnitude of importance of the factors being considered.
8. Pie Chart for visual representation and quick perception of effects.

8. Pie Chart for visual representation and quick perception of effects.

a) Functional Analysis

The poverty is made up of many factors such as income, consumption, asset, health and education. But in quantitative research only income, Age and education of the family is considered. However, the impact of microfinance is analysed on the basis of income, age and education of the family and are considered to be benefiting the family with the productive use of loan.

i. *Multiple Regression Model*

In order to examine the contribution of the indicators in causing more economic development, linear model is used. The analysis is based on multiple regression technique. The specification and justification of variables included in the analysis are used as

$$Y = f(X_1\ X_2\ X_3\ X_4\ X_5)$$

Where

Y = Economic Development

X_1 = Age, X_2 = Income, X_3 = Education

X_4 = Family Size, X_5 = Socio-economic status

The form of equation fitted for development is given below linear model

$$Y = C_0 + C_1X_1 + C_2X_2 + C_3X_3 + C_4X_4 + C_5X_5$$

ii. *Coefficient Variation*

C.V. is used to know the data variation collected from the study area. The more variation shows less

© 2017 Global Journals Inc. (US)

accuracy, less consistency of data. Less variation of data shows more accuracy, more constancy of data.

Formula of coefficient of variation is $C.V. = \frac{\sigma}{x} x100$.

iii. *Correlation Co-efficient (`r' value)*

The correlation co-efficient is a statistic descriptive of the magnitude of the relation between two variables. Correlation coefficients are traditionally defined in such a way as to take values extending from –1 to +1. A negative value indicates a negative relation i.e. X decreases as Y increases. The main purpose of the study is to find out the relationship between the variables.

iv. *Analysis of Variance test*

In the analysis, the total variations are split into explained and unexplained variation. This suggests that one can compute an analysis of variance type of table for analysis.

F-statistic is computed as

$$F = \frac{\text{Mean sum of square of explained sum square}}{\text{Mean sum of square of residual sum square}}$$

$$= \frac{\sum y_i^2 / k-1}{\sum e_i^2 / n-k}$$

since our model consists of five explanatory variable

$$\text{so, } F = \frac{\sum y_i^2 / 4-1}{\sum e_i^2 / n-4} = \frac{\hat{C}^2 \sum x_i^2}{\sum e_i^2 / n-4}$$

The null hypothesis Ho is Ci = 0

if calculated F > tabulated F with (k-1) and (n-k) degrees of freedom with chosen level of significance we reject the null hypothesis and accept that the data is significant.

If calculated F < tabulated F, then we accept the null hypothesis and conclude that data is not significant.

To achieve the objectives of the study i.e. primarily to assess whether the micro finance system is capable of raising the productivity level of the beneficiary families in the field of agriculture, horticulture, animal husbandry, small industry and allied activities and whether there is upgradation of tribal living standard, health and hygiene and housing, drinking, water education, infrastructure situation in tribal areas after Micro Finance linkage of the area in the study area, different techniques and important indicators considered for the following analysis.

Mean, Standard Deviation and Coefficient of Variation (C.V.) of the indicators

Indicators	Mean	S.D.	C.V	t-test
Age (X_1)	2.70	± 0.78	28.98	59.777
Income (X_2)	2.57	± 0.78	30.32	57.129
Education (X_3)	1.72	± 0.69	39.99	43.311
Family Size (X_4)	2.00	± 0.63	31.68	54.681
Socio-Economic Status (X_5)	2.47	± 0.73	29.72	58.283

In the above table it is observed that there is less variation in case of Age (X_1) followed by Socio-Economic Status indicator (X_5), this shows more consistency of opinion collected from the study area. It is also found that in case of the indicator Education (X_3) there is more variation i.e. 39.99, which shows less consistency of data in the study area.

Tabulated value of t-test at 5% level of significance = 1.960 and for 1% level of significance = 2.576.

Here, the t-statistic for the indicators considered viz. Age, Income, Education, Family Size and Socio-Economic Status are significant both at 5% level of significance and 1% level of significance.

© 2017 Global Journals Inc. (US)

Correlation Coefficient (`r' value) between indicators in the study area

Categories	Age (X_1)	Income (X_2)	Education (X_3)	Family Size (X_4)	SES (X_5)
Age (X_1)	1.00				
Income (X_2)	0.87**	1.00			
Education (X_3)	0.81**	0.89**	1.00		
Family Size (X_4)	0.81**	0.77**	0.73**	1.00	
Socio-Economic Status (X_5)	0.83**	0.92**	0.82**	0.74**	1.00

***. Correlation is significant at the 0.01 level*

It reveals from the above table that correlation coefficient (`r') value between income and socio-economic status is 0.92, this shows there exists strong and positive correlation between these two indicators. correlation between these two indicators. Next Next strong and positive correlation exists between income and education i.e. 0.89.

In the above case strong and positive correlation exists between age and income (0.87), age and education (0.81), age and family size (0.81), age and socio-economic status (0.83), income and family size (0.77), education and family size (0.73), education and socio-economic status (0.74). It is observed from the above correlation matrix table that there is almost all the indicators considered for the study are strong and positive correlation exists between the two dependent variables.

b) Chi-square (χ^2) test

i. *Testing of research questions*

The data presented in this chapter are analyzed according to the questions used in this study and the questionnaires administered for the research. In analyzing the research questions, the chi-square (χ^2) test is used at 95 percent confidence interval or 5 percent level of significance. The decision rule is to accept the null hypothesis (H_0) and reject the alternative hypothesis (H_1), if the calculated chi-square is less than the critical value of the chi-square using the requisite degree of freedom. The reverse holds, i.e. reject H_0 and accept H_1 if the calculated chi square value is more than the critical chi square value.

Calculate the chi square statistic χ^2 by completing the following steps:

1. For each *observed* number in the table subtract the corresponding *expected* number (*O — E*).
2. Square the difference [$(O — E)^2$].
3. Divide the squares obtained for each cell in the table by the *expected* number for that cell [$(O - E)^2 / E$].
4. Sum all the values for $(O - E)^2 / E$. This is the chi square statistic.

Hypothesis-1: There a positive relationship between Micro-credit and improved living standards of recipient of these micro credits in the study area.

Test Statistics

Chi-Square	213.973[a]
df	3
Asymp. Sig.	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 75.0.

From the above statistics, we reject H_0 and accept H_1 if the computed χ^2 is more than the critical value or vice versa. Thus, computed χ^2 (213.973) is greater that the critical value of (7.815), thus, we accept the alternative hypothesis H1. This shows that micro-credit availability has a positive impact on living standards of recipient of these micro credits in the study area. The reason for this assertion is that when people with micro enterprises have access to credit, they are able to expand their businesses, employ more people and also not only improve their living standards, but also, improve the living standards of people they employ.

Hypothesis-2: The low income earners are able to obtain credit easily from the Government owned micro finance institutions in the study area.

Test Statistics

Chi-Square	126.96[a]
df	3
Asymp. Sig.	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 75.0.

© 2017 Global Journals Inc. (US)

Thus, the critical value of χ^2 (7.815) is less than the calculated value (126.960), thus, we reject the null hypothesis (H_0) and accept the alternative hypothesis (H_1). The implication of this decision is that there are difficulties encountered by the poor or low income earners in obtaining loans from micro credit institutions. This may be as a result of these microfinance banks not having confidence on these low income earners in repaying back the loan collected; or these low income earners not being able to meet the requirements of these microfinance banks in getting a loan, etc.

c) Regression Results

Linear Regression estimates the coefficients of the linear equation, involving one or more independent variables that best predict the value of the dependent variable. Below table describes the main regression results. It shows the effect of the indicators adopted for the study.

Independent variables

Age	-	X_1	Income	-	X_2
Education	-	X_3	Family Size	-	X_4
Socio-economic	-	X_5			

Regression results – Effect of indicators in case of economic development in the study area

i. *Dependent Variable – Economic Development*

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.865[a]	.749	.745	.334	.116

a. Predictors: (Constant), X_1, X_2, X_3, X_4, X_5

b. Dependent Variable: Y

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	97.949	5	19.590	175.391	.000[a]
	Residual	32.838	294	.112		
	Total	130.787	299			

a. Predictors: (Constant), X_1, X_2, X_3, X_4, X_5

b. Dependent Variable: Y

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.198	.075		2.632	.009
	X_1	.036	.057	.043	.631	.528
	X_2	-.012	.086	-.015	-.143	.886
	X_3	.032	.063	.033	.502	.616
	X_4	.487	.054	.467	9.059	.000
	X_5	.365	.069	.405	5.327	.000

a. Dependent Variable: Y

© 2017 Global Journals Inc. (US)

Residuals Statistics[a]					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.09	3.34	2.19	.572	300
Residual	-.495	.658	.000	.331	300
Std. Predicted Value	-1.921	2.006	.000	1.000	300
Std. Residual	-1.481	1.970	.000	.992	300
a. Dependent Variable: Y					

In most variables the calculated value of the coefficient (Beta) in the regression equation is either perverse or insignificantly different from zero. It shows the indicator family size (X_4) have more effect on economic development in the study area. Next followed by the indicator `socio economic status' have effect on development. Indicators like age, education have positive impact on development. It is observed that the indicator family size has significant contribution towards development in the study area. It is also revealed from the Multiple coefficient of correlation (R) table that calculated value of R square is 0.749, which indicated that there is a strong and significant relationship between the indicators.

Analysis of Variance (ANOVA) for the indicators in the study area

Reliability

Case Processing Summary			
		N	%
Cases	Valid	300	100.0
	Excluded[a]	0	.0
	Total	300	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	N of Items
.957	5

Alpha (Cronbach). This model is a model of internal consistency, based on the average inter-item correlation.

ANOVA						
Source of variation		Sum of Squares	df	Mean Square	F	Sig
Between People		671.669	299	2.246		
Within People	Between Items	207.156	4	51.789	541.222	.000
	Residual	114.444	1196	.096		
	Total	321.600	1200	.268		
Total		993.269	1499	.663		
Grand Mean = 2.29						

Reliability analysis allows studying the properties of measurement scales and the items that compose the scales. The Reliability Analysis procedure calculates a number of commonly used measures of scale reliability and also provides information about the relationships between individual items in the scale. Intra-class correlation coefficients can be used to compute inter-rater reliability estimates.

Where, tabulated value of F-test at 5% level of significance for (4,299) degree of freedom = 2.42 and tabulated value of F-test at 1% level of significance for (4,299) degree of freedom = 3.41, Here, in case of the above table between the indicators (row) is highly significant. The calculated value is 541.222. This shows calculated `F' value is more than tabulated `F' value both at 5% and 1% level of significance.

A significant challenge for microfinance is to serve as a development of microeconomic. As observed, in the study area, family size followed by the socio-economic status of the tribal in Nilgiri ITDA Block

© 2017 Global Journals Inc. (US)

of Balasore district has played the major and significant role for the economic development. It is also observed that indicators like income and socio-economic status varying in the same and positive direction. If socio-economic status is increasing, the income on an average is also increasing in the study area, which indicates effective impact on economic developmental of microfinance activities. The development of microfinance sustainable poverty alleviation tool, is reaching is undoubtedly critical in improving access to finance sufficient scale to fulfill demand for financial services. This emphasis on Microfinance seems to have generated a view that Microfinance development could provide an answer to the problems of rural financial market development. Beholding the present situation, we must take a long an active people-centred and growth-oriented poverty alleviation strategy - a strategy which seems to incorporate particularly tribal aspirations, dynamism and involvement.

A general conclusion that emerges from this research study is that access to finance is important for tribals of Nilagiri to unlock them from the shackles of poverty to realise their full potentials. The statistical reported results derived using quantitative analysis suggests that all three variables: income, education and family size are significant and have a high correlation with access to finance. A closer examination of results suggest that an increase in income of the family is positively correlated with the size of loan up to a point but this relationship does not holds when the size of loan reached a certain size. So, there may be an optimal loan size which MFIs should offer. Thus the relationship between increase in income and increase in amount of loan has inverted U shaped. These results have implications for microfinance organisations themselves, donors and policy makers at large. The logistic regression results show that with the increase in amount of loan, there is probability of increase in children education.

The qualitative analysis shows microfinance loans have positive impact on poverty reduction. Access to finance leads to an increase in income, product knowledge, especially when this is supported with peer mentoring for the new members of microfinance institution.

The increase in, product knowledge and peer mentoring help to reduce information asymmetry and the regular monthly meetings and repayments help to build bonds, create a sense of belonging, learning relating to business practices and in instilling business discipline.

There is excessive focus amongst MFIs to support start-ups who may have potential to become independent earners. Therefore it is concluded from the fact that ensuring the MFIs have a desired positive impact on poverty reduction amongst Tribals.

V. Summary of Finding, Conclusion and Suggestion

Nilgiri is a backward hilly region in Balasore district. Nilagiri ITDA block of district Balasore in Odisha which are covered under the study to explain the micro-finance system in tribal society residing in those areas. Nilgiri is the only ITDA Block of Balasore district which is densely populated by tribal people. Therefore the research in Nilagiri, Balasore district of Odisha, has been adopted in the case study method for *the assessment of the impact of microfinance on the lives of the rural poor* in selected rural settings and the research method for empirical inquiry that investigates a contemporary phenomenon within the real-life context.

The interventions so far made in the Nilagiri ITDA areas on various components indicates that a large number of interventions in the field of income generating schemes, infrastructure development schemes and on information, education and communication (IEC) have been extended in the project area, but there are some missing critical socio-economic and physical infrastructures.

The overall strategy of the micro-financing programme focuses on empowering the tribals and enabling them to enhance their food security, increase their incomes and improve their overall quality of life through more efficient natural resources management based on the principles of improved watershed management and more productive environmentally sound agricultural practices and through off farm/non-farm enterprise development.

It is observed that female (60%) is numerically more than male (40%), which shows the dominancy of tribal's and plays important role in the poverty alleviation of tribal through microfinance in the study area. Microfinance is also providing financial services to the poor who are not served by the conventional formal financial institutions - it is about extending the frontiers of financial service provision.

The provision of such financial services requires innovative delivery channels and methodologies. The needs for financial services that allow people to both take advantage of opportunities and better management of their resources.

The importance of education recognized for growth i.e in the study area 1.67% only are College/University, 8.33 % are matriculate, 50% are below matric and 40% of the respondents are found illiterate. This is definitely an issue and challenge for the nation's growth. The more the people educated obviously takes the opportunity of microfinance system.

Microfinance is one of the effective tool amongst many for poverty alleviation. However, it should be used with caution -despite recent claims, the equation between microfinance and poverty alleviation is

© 2017 Global Journals Inc. (US)

not straight-forward, because poverty is a complex phenomenon and many constraints that the poor in general have to cope with. We need to understand when and in what form microfinance is appropriate for the poorest; the delivery channel, methodology and products offered are all inter-linked and in turn affect the prospect and promise of poverty alleviation. The access to the formal banking services is difficult for the poor.

Thus, it is clear that majority of the borrowers are not repaying their loans in regular instalments. This may be mainly due to unproductive utilization of loan or insufficient return on investment.

Since change in social status was under multiple responses it was stated separately. Thus it is clear that socio-economic developments of the borrowers were caused under different parameters by effecting utilization of loan.

The facts concerning the income level i.e 70% of the family of respondents earn monthly more than Rs.12000 and 30% of the sample earn monthly below Rs.12000 annually. The study depicts that income distribution of the respondents is skewed and found that the higher income group is predominant in the sample area. It is also observed that the trend of the modern time is that the size of the family in general has been reduced, i.e. from an estimated number of eight to two or four. Many as 67% respondents are having mud and thatched house, 20% are having semi-pucca houses and only 13% are having pucca houses in the study area. So most of the respondents possessed mud and thatched houses. Only 10% of the land are under irrigation. Almost 90% of people do the single crop in the sample area i.e the traditional food crop rather than commercial crop. The people in the sample area prefers to acquire loans from the formal financial institutions i.e regional rural bank and nationalised bank. The duration of loans is 5 years as in case of 80% of the people and they utilised it it productive purpose. In addition, the process of acquiring a loan entails many bureaucratic procedures, which lead to extra transaction costs for the poor. Formal financial institutions are not motivated to lend money to them. In general, formal financial institutions show a preference for urban over rural sectors, large-scale over small scale transactions, and non-agricultural over agricultural loans.

a) Conclusion

Microcredit and microfinance have received extensive recognition as a strategy for poverty reduction and for economic empowerment. Microfinance is a way for fighting poverty, particularly in rural areas, where most of the world's poorest people live rural development and poverty reduction are commonly related to the issue of rural employment. In Nilagiri ITDA of Balasore district the tribal households livelihood strategies comprise several options, including farming and non-farm activities, local self-employment and wage employment, and migration. Microfinance has proven to be an effective and powerful tool for tribal development and poverty reduction.

Poverty is a threat to the tribals, because they cannot meet up his primary or basic needs of life, that of his family or his dependents. Poverty is like that which sucks the blood for its livelihood. It exists where people are unable to make both ends meet for better livelihood. Finally it is concluded that this study is set out to establish the relationship between microfinance and poverty reduction, the difference between microfinance and traditional savings rotating system and loan repayment and poverty reduction.

After a theoretical and empirical exploration of relevant literatures, it is concluded that there is a significant relationship between microfinance and poverty reduction; significant difference between microfinance and traditional savings rotating system; loan repayment and poverty reduction.

On the premises of the revelations from this study, we conclude that thus microfinance alone cannot reduce the level of poverty in any given society except the government provide the basic infrastructural facilities such as good road, constant power supply, good transport system etc that is when microfinance will play an effective and efficient role of poverty reduction instrument in contemporary society. Therefore, the following recommendations were provided to stimulate the use of microfinance as a poverty reduction strategy in tribal societies

b) Suggestions

Numerous traditional and informal system of credit that were already in existence before micro finance came into vogue. Viability of micro finance needs to be understood from a dimension that is far broader- in looking at its long-term aspects too .very little attention has been given to empowerment questions or ways in which both empowerment and sustainability aims may be accommodated. Failure to take into account impact on income also has potentially adverse implications for both repayment and outreach, and hence also for financial sustainability. An effort is made here to present some of these aspects to complete the picture.

The organizations involved in micro credit initiatives should take account of the fact that:

- Credit is important for development but cannot by itself enable very poor tribal's to overcome their poverty.
- Making credit available to tribals does not automatically mean they have control over its use and over any income they might generate from micro enterprises.
- In situations of chronic poverty it is more important to provide saving services than to offer credit.

© 2017 Global Journals Inc. (US)

- A useful indicator of the tangible impact of micro credit schemes is the number of additional proposals and demands presented by local villagers to public authorities.

India is the country where there is a collaborative model between banks, NGOs, MFIs and Tribal development organization exists. It is clear that micro finance need to look beyond just increasing tribal's access to savings and credit and organizing self help groups to look strategically at how programmes can actively promote higher in poverty alleviation.

References Références Referencias

1. Agence Nationale De La Recherche (2008-10),"Rural Micro Finance and Employment. Do processes matter?", Project leader: Isabelle Guerin (LPED IFP).
2. Ahmad (1999), "Tribals Empowerment: Self Help Groups", Books of macro dynamics of micro finance, published by Anurag Jain for excel books, A-45, Naraina, phase I, New Delhi - 110028, pp.17-25.
3. Alok Misra (2006), "Micro Finance in India and millennium development goals: maximizing impact on poverty", Discussion paper for workshop on world bank Singapore 18th September 2006, PhD candidate in development studies Victoria university of Wellington New Zealand.
4. Aloysius P. Fernandez (2007), "A Micro Finance Institution with A Difference", Economic and Political Weekly, vol. 42(13): pp.1185 - 1189, Mar 2007.
5. Amjath Babu T.S and S. Suryaprakash (2005), "Povert y Alleviation and Empowerment Tribals-Role of Micro Credit", Books of macro dynamics of micro finance, published by Anurag Jain for excel books, A-45, Naraina, phase I, New Delhi - 110028, pp.40-43.

© 2017 Global Journals Inc. (US)

This page is intentionally left blank

© 2017 Global Journals Inc. (US)

Global Journal of Management and Business Research: B
Economics and Commerce
Volume 17 Issue 2 Version 1.0 Year 2017
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Effet Combiné Des Financements Extérieurs Sur La Croissance Economique En Afrique Subsaharienne

By Gachili Ndi Gbambie Ladifatou

Université De Dschang

Abstract- The purpose of present paper is to determinate combined effect of external funding: official development assistance (oda), workers' remittances (wr) and foreign direct investment (fdi) on economic growth in sub-saharan africa (ssa). With a dynamic panel of twenty-three ssa countries, from 1985 to 2014, economic growth equation integrating external funding is estimated thanks to the generalized method of moments (gmm) system from blundel and bond (1998). The results of the analysis show that external funding, individually or combined does not contribute to economic growth in ssa.

Keywords: *external funding, ODA, WR, FDI, economic growth, SSA.*

GJMBR-B Classification: *JEL Code: H00, G00*



Strictly as per the compliance and regulations of:

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

Effet Combiné Des Financements Extérieurs Sur La Croissance Economique En Afrique Subsaharienne

Gachili Ndi Gbambie Ladifatou

Resume- L'objectif du présent article est de déterminer l'effet combiné des financements extérieurs : aide publique au développement (apd), transferts financiers des migrants (tfm) et investissements directs etrangers (ide) sur la croissance economique en afrique subsaharienne (ass). Sur une période allant de 1985 a 2014, avec un panel dynamique de vingt-trois pays de l'ass, une equation de croissance economique intégrant les financements extérieurs est estimée grâce a la méthode des moments généralisés (gmm) en système de blundel et bond (1998). Les résultats obtenus ont révélé que les financements extérieurs (apd, tfm, ide), de façon individuelle ou combinée ne contribuent pas a la croissance economique en ass.

Motsclés: financements extérieurs, APD, TFM, IDE, croissance economique, ASS.

Abstract- The purpose of present paper is to determinate combined effect of external funding: official development assistance (oda), workers' remittances (wr) and foreign direct investment (fdi) on economic growth in sub-saharan africa (ssa). With a dynamic panel of twenty-three ssa countries, from 1985 to 2014, economic growth equation integrating external funding is estimated thanks to the generalized method of moments (gmm) system from blundel and bond (1998). The results of the analysis show that external funding, individually or combined does not contribute to economic growth in ssa.

Keywords: external funding, ODA, WR, FDI, economic growth, ssa.

I. Introduction

Les pays africains et particulièrement les pays de l'afrique subsaharienne (pass) se caractérisent par l'insuffisance des ressources intérieures au regard des besoins de financement. En effet, le problème de déficit d'épargne intérieure par rapport a l'investissement, observé a l'échelle du continent africain est crucial et se pose avec acuité. En ass, le taux d'épargne etait de 17,7% en 2012 contre 25,2% en asie du sud et 22,3% en amérique latine et les caraïbes (cnuced, 2014). Selon l'approche néoclassique, l'épargne est préalable a l'investissement et est insuffisante dans les pays en développement (ped). Dès lors, la pénurie d'épargne est un facteur explicatif fondamental du blocage du développement. Précisément, harrod (1939, 1942) et domar (1946) soulignent que dans une economie a taux d'épargne faible, la croissance economique sera aussi faible. Pour augmenter le taux de croissance du revenu, il faut et il suffit d'augmenter le taux d'investissement et donc le taux d'épargne. Mais cette augmentation y est impossible du fait de la faiblesse des revenus. Un apport de financements extérieurs est donc nécessaire.

Ainsi, les financements extérieurs ont permis d'accélérer la croissance dans de nombreux pays aujourd'hui industrialisés (raffinot, 1991). Les pays tels que les etats unis, l'australie, la nouvelle zélande, le canada ont fondé leurs croissances economiques sur un large recours aux financements extérieurs et partant, ils diffèrent des pass.

Les pass semblent ne pas tirer avantage des ressources financières massives qu'ils reçoivent depuis plus d'un demi-siècle sous formes d'aide publique au développement (apd), de transferts financiers des migrants (tfm) et des investissements directs etrangers (ide) car leur situation economique n'est guère reluisante. En effet, leurs taux de croissance economique (2,6 entre 1980-1989, 2,2 entre 1990-1999, 6,6 entre 2000-2008, 5,1 entre 2009-2014) sont encore insuffisants pour leur permettre de dégager les ressources nécessaires au financement du développement en vue d'éradiquer la pauvreté. Etant donné que l'ass fait figure de la région la plus pauvre de la planète. La concentration grandissante de la pauvreté mondiale y est préoccupante. Selon le rapport de la bm sur la pauvreté en 2016, l'asie de l'est représentait la moitié des pauvres contre quelques 15% en ass en 1990. En 2015, la situation se serait pratiquement inversée, l'ass concentrant la moitié des pauvres du monde, contre environ 12% en asie de l'est. De plus, l'ass reste a l'écart du redéploiement industriel manufacturier mondial car en 2013, la part moyenne du secteur manufacturier dans le pib y etait de 11%, toujours la même valeur qu'en 1990 (chen, geiger et fu, 2015).

Pourtant, la théorie des stades de la balance des paiements développée par cairnes (1874) et bastable (1899) préconise que les financements extérieurs investis dans un pays permettent une croissance economique additionnelle. Qu'est ce qu'il fait donc problème en ass ?

Author: Ph.d en economie, université de dschang, cameroun.
e-mail: ladygbambie@yahoo.fr

© 2017 Global Journals Inc. (US)

Pour elucider ce paradoxe, il semble judicieux de s'interroger sur la capacité des financements extérieurs a promouvoir la croissance economique en ass. Autrement dit,

Les financements extérieurs tels que l'apd, les tfm et leside contribuent t-ils a la croissance economique en ass ?

II. Tendance Des Financements Exterieurs (apd, tfm, ide) en ass

Les pass bénéficient depuis leurs indépendances des financements extérieurs comme alternative au déficit d'épargne encouru. Ces financements prennent la forme d'investissements de portefeuille, de dette extérieure, d'actions ou d'obligations, d'apd, de tfm et deside. Cependant, parce que tous les pass retenus dans le cadre de cette etude n'ont pas accès aux marchés financiers mondiaux et en raison de l'instabilité des investissements de portefeuille et des incidences potentiellement négatives de la dette extérieure sur la croissance economique, seuls l'apd, les tfm et leside ont eté retenus comme principales sources de financements extérieurs entrant dans les pass.

Le souhait d'attirer leside en afrique n'est pas nouveau dans le contexte théorique du développement. Les ide semblent en effet etre la clé qui permettra de pallier au manque de ressources (ajayi, 2006). Dans cette logique, les pays d'afrique en général et les pass en particulier ont multiplié des stratégies pour les attirer. Par conséquent, la place de l'afrique dans le paysage mondial deside est bien meilleure actuellement qu'au tournant du xxie siècle, puisque cette part ne ressortait qu'autour de 0,6 % du total mondial (bad, ocde et pnud, 2014). En 2012, elle a reçu 56 milliards usd d'ide, soit 4% des flux mondiaux (cnuced, 2015). En 2013, les flux d'ide entrant en afrique ont connu une atrophie, passant a 54 milliards usd et sont restés stables en 2014. Spécifiquement, au cours de la décennie 2000-2010, les flux d'ide en direction de l'ass ont eté multipliés par plus de six et sont passés d'environ 6,3 milliards usd a 35 milliards usd en 2010, soit 2,5% du total des flux mondiaux (bm, 2014). Ils ont atteint 45 milliards usd en 2013, soit 3,1% des flux mondiaux (cnuced, 2015). Pour pouvoir en bénéficier, les pays hôtes multiplient les stratégies d'attraction de même que les pays bénéficiaires de l'apd.

Tout l'appareil de l'apd et l'idée selon laquelle les pays, par l'effort de leurs contribuables, puissent et doivent aider d'autres pays apparaissent véritablement après la seconde guerre mondiale. Toutefois, ces concepts prendront une nouvelle dimension a partir des années 60, dans le cadre de la décolonisation où les pays développés gardent un lien avec les anciennes colonies en leur accordant de l'aide dans une logique d'influence géopolitique, et eviter entre autres que ces pays ne tombent sous l'influence de l'urss.

A cet effet, jusqu'à la fin des années 1970, l'apd etait la principale source de financement extérieur pour les ped notamment ceux de l'afrique. Celle-ci a connuen 2012 et pour la deuxième année consécutive une hausse en volume de l'apd nette. Les versements nets d'apd ont progressé de 51,7 milliards en 2011 a 52,7 milliards usd en 2012, soit un accroissement de 1,9 %, l'ass etant la principale région bénéficiaire (bad, ocde, pnud, 2014). D'après chauvin et golitin (2010), pour les pays africains a faible revenu, l'aide représente la plus grande part des ressources extérieures. En revanche, pour les pays africains a revenu intermédiaire de la tranche supérieure, les investissements privés (ide) représentent la source primordiale de financement. Le scénario est différent dans les pays africains a revenu intermédiaire de la tranche inférieure pour lesquels les tfm représentent depuis quelques années l'essentiel des apports extérieurs.

Les tfm sont le fait des emigrés qui, confrontés dans leur pays a des conditions de vie difficiles aggravées par l'inertie politique et administrative de leurs dirigeants (tamokwe, 2007), s'estiment pratiquement contraints a l'exil. C'est ainsi qu'une partie significative de la force de travail de ces pays se retrouve en situation d'immigrés dans les pays développés. Malgré les mesures restrictives prises par ces derniers, le nombre de migrants ne cesse de croître, par conséquent, les tfm augmentent egalement. En effet, les envois de fonds ont gagné en importance ces dernières années. D'après le rapport 2014 des nations unies sur le développement economique en afrique, en 1990, le continent ne recevait qu'environ 8,9 milliards usd en envois de fonds, somme représentant environ 11 % des flux globaux et 26 % des flux vers les ped. En 2012, il a reçu 62,4 milliards usd, soit 12 % des flux globaux et 17 % des flux vers les ped. Selon la bm (2011), l'ass a reçu 3,2 milliards usd de tfm en 1995. Ce montant a progressivement evolué et en 2013, il a eté multiplié par 10, soit 32 milliards usd (bm, 2015).

Les tfm retiennent davantage l'attention des décideurs en afrique car ils semblent etre une source de financement moins instable que l'apd et leside (cnuced, 2015). Contrairement a l'idée selon laquelle ils ne servent qu'à financer la consommation des ménages, les tfm ont aussi des incidences notables sur l'investissement et l'épargne. Dans une etude consacrée aux pays africains, baldé (2011) relève que bien qu'ils soient quantitativement plus modestes que l'apd dans la plupart des pays, les envois de fonds ont des effets plus positifs sur l'investissement et l'épargne, et donc sur la croissance. Dans ces conditions, les pays africains devraient accorder plus d'attention aux envois de fonds en tant que source potentielle d'un financement stable et non générateur de dette.

On constate qu'en ass, les flux de financements extérieurs (apd, tfm, ide) ont progressé a un rythme

© 2017 Global Journals Inc. (US)

moyen avant le 21e siècle. Dans le même temps, le taux moyen de croissance economique n'y etait pas elevé. De 2,6% entre 1980-1989, il a chuté a 2,2% au cours des années 1990-1999 (fmi, 2014). Depuis le début du 21e siècle, ces financements connaissent une accélération de leur croissance qui s'accompagne des taux moyens de croissance economique aussi a la hausse. En effet, le taux moyen de croissance economique entre 2000-2008 a considérablement augmenté a 6,6%. Il a eté freiné par la crise financière de 2008 et est passé a 5,1% entre 2009-2013, la même valeur enregistrée en 2014 (fmi, 2014).

III. Revue De La Litterature

a) Revue Théorique

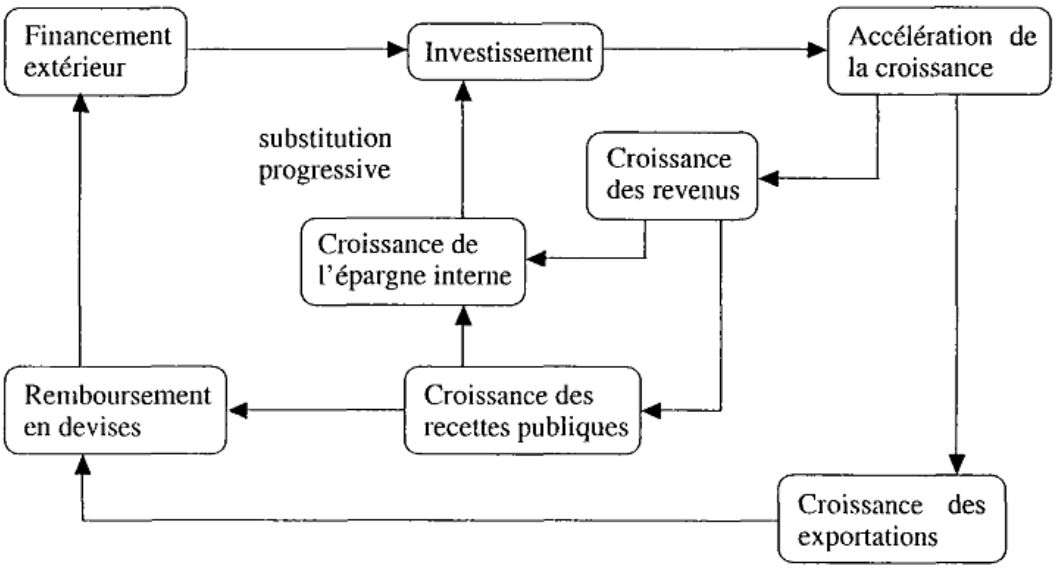
Les premiers travaux théoriques sur la relation financement extérieur et croissance economique ont eté elaborés par cairnes (1874) et bastable (1899) a la fin du xixe siècle sous l'appellation de ''théorie de la croissance transmise par les mouvements de capitaux'' ou encore ''théorie des stades de la balance des paiements''.

- Théorie des stades de la balance des paiements

D'après cette théorie d'inspiration néoclassique, l'importation puis l'exportation de capitaux fait passer les economies par quatre stades qui marquent la transformation a terme des pays nouvellement emprunteurs en pays prêteurs evolués. Ces phases se font au niveau de la balance commerciale, de la balance des revenus (intérêts reçus du reste du monde moins intérêts versés), de la balance des capitaux et de la balance interne (epargne sur les revenus internes moins investissements intérieurs).

Au début de leur croissance, la situation des pays est caractérisée par la faiblesse de l'épargne qui porte les taux d'intérêt a des niveaux très elevés. Les capitaux extérieurs sont investis dans le pays et permettent une croissance economique additionnelle. Cette croissance entraîne une augmentation des revenus, et donc aussi de l'épargne interne qui va progressivement se substituer a l'épargne extérieure. Ces revenus supplémentaires génèrent egalement des revenus fiscaux additionnels et permettent aussi de développer les gains en devises par la croissance des exportations (la balance commerciale devient positive). Ainsi, progressivement le pays importateur de capitaux pourra devenir exportateur de capital. Le taux d'intérêt baisse et il devient plus intéressant de placer ses capitaux ailleurs. La balance des revenus devient donc progressivement positive. Enfin, la dernière etape est celle où les revenus extérieurs ont atteint un tel niveau que les termes de l'échange du pays exportateur de capitaux se dégradent du fait de l'augmentation du taux de change, entraînant un déficit de la balance commerciale. Les mécanismes de transmission de la croissance sont représentés par la figure suivante.

Graphique: Mécanisme de substitution progressive de l'épargne locale aux flux extérieurs de capitaux.



Source: raffinot (1991 : 33)

Dans cette théorie d'inspiration néoclassique, le progrès technique est considéré comme exogène. Il s'effectue a un taux constant fixé et donné en dehors du modèle (telle une manne tombée du ciel). A l'opposé de la théorie néoclassique, les théories de la croissance endogène ou nouvelles théories de la croissance développées a partir de la fin des années 1970 notamment par paul romer, robert lucas et robert barro cherchent a expliquer le rythme et l'orientation du progrès technique. Cependant, le modèle de barro retiendra particulièrement l'attention a cause de son implication dans les infrastructures.

© 2017 Global Journals Inc. (US)

- Nouvelles théories de la croissance economique

Le premier modèle de croissance endogène faisant du capital public le moteur de la croissance a eté développé par barro (1990). A la différence du modèle néoclassique dans lequel le capital public n'intervient que dans la détermination du niveau de revenu d'équilibre, le modèle de barro explique la trajectoire de croissance a long terme des economies.

En effet, barro considère l'impact des dépenses publiques sur la croissance economique. Il part du principe relativement simple que des dépenses visant a créer des infrastructures telles qu'une autoroute, une ligne de chemin de fer ou encore un réseau de télécommunication rendent plus efficace l'activité productive des entreprises privées. Cependant, il s'agit de biens plus ou moins collectifs. Dans son modèle, il considère que ce sont des biens collectifs purs (non-rivaux, non-excluables). Il se pose alors le problème traditionnel de leur financement par le secteur privé. La sphère privée ne peut se substituer au gouvernement pour le financer. C'est la raison pour laquelle l'etat prélève un impôt de façon a produire ce type de biens collectifs.

L'auteur considère une economie fermée composée d'agents a durée de vie infinie dont les préférences inter temporelles sont représentées par la fonction u définie par :

$$U = \int_{t=0}^{\infty} u(c_t) e^{-\rho t}\, dt$$

Où ρ désigne un facteur d'escompte psychologique et où l'utilité instantanée notée $u(c_t)$ est de la forme c.r.r.a (*constant relative risk aversion*) :

$$u(c_t) = \frac{c_t^{1-\sigma} - 1}{1-\sigma} \quad \sigma > 0$$

On suppose que la population active est constante. La production de la firme i est représentée par une fonction de type cobb douglas définie par :

$$Y_i = A\, L_i^{1-ek}\, K_i^{ek}\, G^{eg}$$

Les termes l_i et k_i désignent respectivement le niveau de l'emploi et le stock de capital privé de la firme i a la date t. Les paramètres e_k et e_g correspondent respectivement aux elasticités de la production par rapport au stock de capital privé et aux investissements publics ($e_g = 1 - e_k$: les rendements d'échelle sont constants). G représente les dépenses gouvernementales agrégées.

Le capital privé a des propriétés usuelles. Il connait des rendements décroissants. A dépenses publiques constantes, sa productivité marginale décroit.

Le capital public est une dépense financée par l'etat.Les dépenses sont intégralement financées par un impôtque barro suppose proportionnel au revenu : $G = \tau Y$

L'idée de barro est que la dépense publique a deux effets opposés. Premièrement, le capital public rend le capital privé plus productif et evite que sa productivité marginale s'annule progressivement quand le revenu augmente. Cependant, l'impôt a un effet dépressif sur cette productivité puisqu'il réduit son rendement privé enotant aux entreprises une part du revenu tiré de leur activité.

Deuxièmement, une croissance endogène apparaît. Dans ce cas, les dépenses publiques permettent la croissance du revenu. Celle-ci permet l'accroissement de la base fiscale. Cette dernière induit une croissance des dépenses publiques qui a leur tour rendent possible l'accumulation du capital. Sur le sentier de croissance d'état régulier, le rapport de la dépense publique au revenu reste constant egal au taux d'imposition.

Barro cherche a dépasser son propre cadre théorique. Il fait quelques critiques sur la nature des dépenses publiques. Tout d'abord, il relève que si les dépenses qui représentent une prestation de services aux consommateurs ont un impact en termes d'utilité, elles découragent la croissance economique. En effet, elles n'accroissent pas la productivité du capital privé mais leur financement par l'impôt pèse sur la rentabilité du capital. Seul l'effet négatif joue au niveau des entreprises. L'imposition liée a ces dépenses décourage l'épargne et l'investissement.

b) Revue Empirique

Parmi les auteurs qui se sont intéressés a l'effet global des ressources extérieures sur la croissance economique, figurent lahdhiri et hammas (2012). Dans leur article, ils sont parvenus a la conclusion selon laquelle les tfm sont la source qui a le plus d'impact sur la croissance devant les ide car un accroissement de 1% des tfm est lié a une hausse de 29,63% du taux de croissance annuel du pib pendant qu'une augmentation de 1% des ide entraine une hausse de 0,67% du taux de croissance du pib. Cependant, seulement l'impact de l'apd n'est pas significatif sur la croissance. Cet impact pourrait même etre négatif. Ce constat reflète le fait que l'effectivité de l'apd dépend de plusieurs facteurs.

Dans le même ordre d'idées, ahmed et martinez-zarzoso (2012) ont estimé une equation pour evaluer l'extension par laquelle les tfm réagissent aux fluctuations cycliques au pakistan et dans les pays de provenance de ces flux en comparaison a l'apd et aux ide.

Par l'usage du modèle svar (*structural vector autoregressive*), ils ont trouvé que les tfm sont contra cycliques et stabilisants, et servent par conséquent comme un stabilisateur pour l'économie pakistanaise. L'apd apparait etre acyclique et stabilisante alors que les ide sont pro cycliques et déstabilisants. En outre, deux caractéristiques font des tfm une source importante de change etranger au pakistan en

© 2017 Global Journals Inc. (US)

comparaison auxide et a l'apd : les tfm sont relativement stables et ils sont contra cycliques.

Pour comparer les effets des ide, de l'apd et des tfm, benmamoun et lehnert (2013) se sont servis de la méthode des moments généralisés. Grâce aux données de panel sur la période 1990-2006, ils etablissent que les tfm, leside et l'apd sont positivement et significativement liés au taux de croissance des pays a revenu faible. Spécialement, l'impact des tfm est plus elevé. En d'autres termes, les tfm, plus que l'apd et leside, sont prouvés etre un grand contributeur de la croissance economique. Les auteurs concluent en insistant sur le besoin pour les responsables politiques et les hommes d'affaire de stimuler ces flux de capitaux extérieurs que sont les tfm et de créer une distribution appropriée pour le plein usage des potentiels développementalistes

Parallèlement, driffield et jones (2013), a l'aide de la méthode *3-stage least squares panel systems estimator* ont estimé simultanément quatre equations pour déterminer l'impact des ide, de l'apd et du tfm sur la croissance des pays en développement. Il ressort de cette etude que les ide et les tfm ont tous un impact positif et significatif sur la croissance du pib. Par contre, l'apd a un impact négatif et significatif sur la croissance du pib. Cet impact est atténué par un environnement institutionnel meilleur. Les pays qui protègent les investisseurs et qui ont une bonne qualité de système judiciaire connaissent une augmentation de leurs croissances.

On remarque que peu d'études ont eté menées sur l'impact global de l'apd, deside et des tfm. Celles qui se sont attelées a cet exercice ont employé une méthode différente de la gmm en système (ahmed et martinez-zarzoso, driffiefd et jones) ont travaillé sur une assez courte période (benmamoun et lehrert). En plus, ils n'ont pas mené leur etude en ass.

IV. Methodologie

a) *Zone d'étude, nature et source des données*

Les estimations sont menées sur un panel dynamique de vingt-trois pass présentés dans le tableau ci-dessous sur une période allant de 1985 a 2014. La raison principale de l'exclusion des autres pays de l'analyse est l'absence des données autant pour certaines séries que pour certains pays. Les données macroéconomiques qui ont servis a l'analyse econométrique sont de sources secondaires et proviennent du cd-rom de la banque mondiale (world development indicators, 2015) et de l'africa development indicators (2015).

Tableau 1: Pays retenus pour l'étude

Bénin	Ethiopie	Mozambique	Sierra leone
Botswana	Gambie	Niger	Soudan
Burkina faso	Ghana	Nigeria	Swaziland
Cameroun	Kenya	Ouganda	Togo
Cap vert	Lesotho	Rwanda	Zambie
Côte d'ivoire	Mali	Sénégal	

b) *Présentation du modèle*

Contrairement au modèle développé par barro (1990) et présenté ci-dessus, le modèle développé pour cette etude suppose que l'économie est ouverte. Dans la pratique, un obstacle important a l'utilisation de spécification faisant intervenir l'investissement public tient a la forte incertitude qui caractérise son evaluation dans les pays les "plus pauvres". Dans ces pays, une part importante de la formation brute de capital fixe (fbcf) des administrations publiques est financée par l'extérieur. Le modèle proposé dans cette etude va en tenir compte.

Pour estimer l'effet combiné des financements extérieurs sur la croissance economique, reprenons le modèle cobb-douglas a deux variables:

$$Y = A\,L^{\alpha}\,K^{\beta}\,\varepsilon \qquad (1)$$

Y est le taux de croissance du pib réel par habitant, l désigne l'emploi, k est le capital et $\boldsymbol{\varepsilon}$ le terme d'erreurs. K n'est plus considéré uniquement comme le capital privé mais comme le capital global nécessaire au financement de l'investissement.

On suppose que ce capital provient des flux de financements extérieurs pris comme un tout et non plus des taxes comme propose barro (1990) tel que:

$$K = APD.TFM.IDE \qquad (2)$$

A l'opposé du modèle de croissance néoclassique, le progrès technique (a) n'est plus exogène dans l'équation. Il s'explique par plusieurs variables. La fonction de a peut etre la suivante :

$$A_t = A_0 x^b{}_t \qquad (3)$$

X est l'ensemble des variables de contrôle et a_0 considéré comme une constante.

L'ensemble des variables de contrôle x est constitué de l'ouverture commerciale (ouv), du taux de change (exc), du taux d'inflation (inf), du capital humain (ch), de la dette extérieure (dex), de l'épargne domestique (edo) et de la population (pop). Le progrès technique endogène peut egalement etre expliqué par l'afflux des financements extérieurs. Par conséquent, ces flux (apd, tfm et ide) sont aussi introduits parmi les variables de contrôle. Le progrès technique (a) prend donc la forme ci-dessous :

© 2017 Global Journals Inc. (US)

$$A_t = A_0\, OUV_t^{b1}\, EXC_t^{b2}\, INF_t^{b3}\, CH_t^{b4}\, DEX_t^{b5}\, EDO_t^{b6}\, POP_t^{b7}\, APD_t^{b8}\, TFM_t^{b9}\, IDE_t^{b10} \quad (4)$$

L'équation de la croissance economique qui en découle avec l'introduction du capital et de la technologie est la suivante :

$$Y_t = A_0\, OUV_t^{b1}\, EXC_t^{b2}\, INF_t^{b3}\, CH_t^{b4}\, DEX_t^{b5}\, EDO_t^{b6}\, POP_t^{b7}\, APD_t^{b8}\, TFM_t^{b9}\, IDE_t^{b10}\, L_t^{b11}\, (APD.TFM.IDE)_t^{b12}\, \varepsilon_t \quad (5)$$

Lorsqu'on introduit le logarithme népérien, on obtient l'équation qui suit:

$$\ln Y_t = b_0 + b_1 \ln OUV_t + b_2 \ln EXC_t + b_3 \ln INF_t + b_4 \ln CH_t + b_5 \ln DEX_t + b_6 \ln EDO_t + b_7 \ln POP_t + b_8 \ln APD_t + b_9 \ln TFM_t + b_{10} \ln IDE_t + b_{11} \ln L_t + b_{12} \ln APD.TFM.IDE_t + \ln \varepsilon_t \quad (6)$$

Avec $b_0 = \ln a_0$

Le modèle dynamique qui va déceler l'effet combiné ou conjugué des flux de financements extérieurs s'écrit comme suit :

$$\ln Y_{it} = b_0 + b_1 \ln Y_{it-1} + b_2 \ln OUV_{it} + b_3 \ln EXC_{it} + b_4 \ln INF_{it} + b_5 \ln CH_{it} + b_6 \ln DEX_{it} + b_7 \ln EDO_{it} + b_8 \ln POP_{it} + b_9 \ln APD_{it} + b_{10} \ln TFM_{it} + b_{11} \ln IDE_{it} + b_{12} \ln L_{it} + b_{13} \ln APD.TFM.IDE_{it} + \mu_i + \ln \varepsilon_{it_t} \quad (7) \text{ a tester}$$

I est l'indice spatial (les pass) et t l'indice temporel, μ_i est l'effet spécifique invisible lié a chaque pays i qui permet de saisir les autres déterminants de la croissance economique non explicitement pris en compte dans le modèle. $\boldsymbol{E_{it}}$ est le terme de correction d'erreurs.

Dans cette equation, la variable dépendante est le taux de croissance du pib réel par habitant (y). Les variables explicatives sont le terme interactif apd.tfm.ide qui permet de saisir l'effet total ou combiné des financements extérieurs sur la croissance economique.et tient egalement compte de l'interaction qui existe entre ces trois sources de financements extérieurs. Les variables apd, tfm (mesurés par la composante envois de fonds uniquement) et ide pris individuellement qui pourraient ainsi que le terme interactif affecter positivement la croissance economique. Le revenu initial (y_{it-1}), valeur retardée du taux de croissance economique capte l'effet de convergence conditionnelle entre les economies, la dette extérieure (dex) et la population (pop) dont les signes espérés pourraient etre négatifs. L'ouverture commerciale (ouv) mesurée par la somme des importations et des exportations rapportée au pib, le capital humain (ch) approximé par le taux de scolarité au secondaire, l'emploi (l) approché par le nombre d'actifs ayant un emploi et l'épargne domestique (edo) auraient probablement des signes positifs. Le taux de change (exc) et le taux d'inflation (inf) mesuré par le déflateur du pib qui renseigne sur la stabilité macroéconomique sont les seules variables exogènes dont on est indécis quant aux signes attendus.

Ces derniers sont récapitulés dans le tableau suivant.

Tableau 2: Tableau Des Signes Attendus De L'équation Financements Extérieurs-Croissance Economique

Variables exogènes	Signes attendus
Apd.tfm.ide	(+)
Apd	(+)
Tfm	(+)
Ide	(+)
Dex	(-)
L	(+)
Ouv	(+)
Edo	(+)
Inf	(+/-)
Ch	(+)
Pop	(-)
Exc	(+/-)
$Y_{i,t-1}$	(-)

© 2017 Global Journals Inc. (US)

c) Méthode d'analyse

Pour estimer l'équation dynamique ci-dessus la méthode des moments généralisés (gmm) en système de blundel et bond (1998) est usitée. L'estimateur gmm en système combine les equations en différences premières avec les equations en niveau. Les instruments dans l'équation en différences premières sont exprimés en niveau et vice versa tels qu'on aura a faire au système ci-dessous :

$$\left\{\begin{array}{c}\Delta y_{i,t} = \beta\, \Delta y_{\mathrm{i,t-1}} + \varphi \Delta X_{\mathrm{i,t}} + \Delta \nu_{\mathrm{t}} + \Delta \varepsilon_{\mathrm{i.t}} \\ \mathrm{y_{i,t}} = \beta \mathrm{y_{i,t-1}} + \varphi \mathrm{X_{i,t}} + \nu_{\mathrm{t}} + \varepsilon_{\mathrm{i,t}}\end{array}\right\}$$

Ceci suppose que l'équation a estimer sera réécrite sous forme de système lors de l'analyse des données.

La méthode gmm en système de blundel et bond (1998) apporte des solutions aux problèmes de biais de simultanéité, d'endogènéité, de causalité inverse et de variables omises. Cette méthode exploite la variation des données des séries temporelles, tient compte des effets spécifiques invisibles a chaque pays et permet l'inclusion des variables dépendantes retardées comme variables exogènes.

Au détriment de l'estimateur gmm en première différence d'arellano et bond[1] (1991) et des méthodes usuelles telles que les mco, les variables instrumentales, l'estimateur gmm en système de blundel et bond (1998) a eté privilégié car ces deux auteurs ont montré a l'aide des simulations de monte carlo que l'estimateur gmm en système est plus performant que celui en première différence. L'estimateur gmm en première différence donne des résultats biaisés dans les echantillons finis lorsque les instruments sont faibles ou lorsqu'on est en présence des variables persistantes. Le biais affectant l'estimateur d'arellano et bond (1991) et conduisant a une sous estimation du coefficient autorégressif serait d'après blundel et bond (1998), corrigé par l'estimation du système. De plus, avec les méthodes usuelles, les effets fixes spécifiques du pays ne sont pas pris en considération

Pour tester la validité des variables retardées comme instruments, arellano et bond (1991), arellano et bover (1995) et blundel et bond (1998) suggèrent le test de sur identification de sarganet le test d'auto corrélation de second ordre.

L'utilisation de la méthode de l'estimateur gmm en panel dynamique[2] présuppose la quasi-stationnarité des variables de l'équation a niveau et l'absence d'auto corrélation des résidus. Pour cela, nous allons d'abord faire le test de stationnarité sur les séries pour détecter s'il y'a présence de racines unitaires a l'aide du test d'im pesaran et shin.

- Test de racine unitaire d'im pesaran et shin

Pour détecter la présence de racine unitaire sur des données de panel, le test de dickey fuller augmenté (dfa) ne peut plus etre utilisé car si l'on surestime le nombre de retards, la puissance du test dfa est détériorée. Le problème est fondamental si le nombre de retards est sous-evalué. Dans ce cas, la para métrisation du modèle ne permet pas de blanchir totalement les résidus, raison pour laquelle les distributions asymptotiques de dfa ne sont plus valides (hurlin et mignon, 2005).

Les premiers tests de racine unitaire sur panels hétérogènes ont eté proposés par im pesaran et shin (1997), maddala et wu (1999), breitung (2000) et levin et lin chu (2002). Ces auteurs proposent une statistique de test simple fondée sur la moyenne des statistiques de dfa individuelles. L'une des principales faiblesses des tests de breitung (2000) et levin et lin (2002) réside dans le caractère homogène de la racine autorégressive sous l'hypothèse alternative. Autrement dit, pour ces auteurs, dans un panel de pays donné par exemple, lesdits pays se comportent de façon homogène, ce qui est problématique en réalité.

Sous l'hypothèse alternative h_1, les tests d'im pesaran et shin (1997) (ips) autorisent non seulement une hétérogénéité de la racine autorégressive, mais aussi une hétérogénéité quant a la présence même d'une racine unitaire dans le panel. Les auteurs introduisent un test sous la nomination de ***t-bar*** et proposent de tester l'hypothèse nulle $\boldsymbol{\varphi_i} = 0$ pour toutes valeurs de i contre l'hypothèse alternative $\boldsymbol{\varphi_i} < 0$ pour i = 1, 2,….., n_1 et $\boldsymbol{\varphi_i} = 0$ pour i = n_1+1, n_2+2,……., n.

Im pesaran et shin (2003) ont démontré par simulation de monte carlo que leur propre test possède un pouvoir explicatif plus fort que les autres tests de racine unitaire en panel. Nous privilégions donc ce test pour toutes ces raisons.

Si les séries ne sont pas stationnaires, c'est-a-dire que s'il y a existence de racine unitaire, on va employer les tests de pedroni (1999, 2004) pour tester la présence de relation de cointégration entre la croissance et les variables exogènes au détriment des tests d'engle et granger (1987).

[1] La procédure d'Arellano et Bond (1991) consiste à réécrire l'équation initiale en différence première, ce qui élime les effets fixes individuels, puis à utiliser comme instruments pour les séries différenciées leurs propres niveaux retardés. Cette méthode améliore l'estimation par variables instrumentales d'Anderson et Hsiao (1982) en faisant référence à un ensemble de conditions d'orthogonalité définissant des estimateurs GMM optimaux. Elle résout, par ailleurs, le choix délicat concernant la liste des instruments.

[2] Un modèle dynamique est un modèle dans lequel un ou plusieurs retards de la variable dépendante figurent comme variables explicatives. A l'inverse des GMM en panel dynamique, les techniques économétriques standards comme les MCO ne permettent pas d'obtenir des estimations efficientes d'un tel modèle à cause de la présence de la variable dépendante retardée à droite de l'équation.

© 2017 Global Journals Inc. (US)

V. Resultats

a) Résultat De Stationnarité D'ips

Les résultats dudit test sont résumés dans le tableau ci-contre.

Tableau 3: Résultat Du Test De Racine Unitaire D'im-Pesaran-Shin De La Relation Financements Extérieurs-Croissance Economique

	Test de stationnarité a niveau				
	Avec constante		Avec constante et trend		Décisions
	T-stat	P-value	T-stat	P-value	
	-22,648***	0,0000	-22,642***	0,0000	Stationnaire
Apd	-7,3***	0,0000	-7,298***	0,0000	Stationnaire
Séries	-5,814***	0,0000	-5,811***	0,0000	Stationnaire
Y	-10,293***	0,0000	-10,484***	0,0000	Stationnaire
Dex	-4,570***	0,0002	-4,587***	0,0011	Stationnaire
Edo	-6,527***	0,0000	-6,522***	0,0000	Stationnaire
Ouv	-4,695***	0,0001	-4,702***	0,0007	Stationnaire
Inf	-8,481***	0,0000	-8,801***	0,0000	Stationnaire
L	-3,846***	0,0026	-3,854**	0,0145	Stationnaire
Ch	-4,938***	0,0000	-4,967***	0,0002	Stationnaire
Exc	-5,263***	0,0000	-5,300***	0,0001	Stationnaire
Pop	-3,935***	0,0019	-3,948**	0,0108	Stationnaire
Statistique d'im pesaran et shin	28,950***	0,0000	28,833***	0,0000	Absence de racine unitaire commune

*Notes : données en panel stationnaire a *** 1%, ** 5%, * 10%*

Source: Estimations de l'auteur

Au regard du tableau ci-dessus, force est de constater que les p-value de toutes les séries après tests de stationnarité (avec constante et avec constante et trend) sont inférieures a 1% ou a 5%. On conclut donc que toutes les séries sont stationnaires. En plus, la statistique d'im pesaran et shin a egalement une probabilité inférieure aux divers seuils, ce qui signifie qu'il y a absence de racine unitaire commune. Donc le test de cointégration de pedroni ne sera pas nécessaire dans ce cas. Ainsi, nous pouvons passer directement aux estimations sans risque de régression fallacieuse.

b) Résultats De L'estimation De L'effet Combiné

Ces résultats sont présentés dans le tableau de la page suivante.

Tableau 4: Esurltats De L'effet Combiné Des Financements Extérieurs Sur La Croissance Economique.

Colonne 1	Colonne 2		Colonne 3	
Méthode des gmm en système	Estimation sans terme interactif apd.tfm.ide		Introduction du terme interactif apd.tfm.ide	
Variables explicatives	Coefficients (z-stat)	P-value	Coefficients (z-stat)	P-value
Constante	68,892 (0,58)	0,565	215,195 (1,44)	0,151
Revenu initial (y l1)	0,0828** (2,10)	0,035	0,0828* (2,10)	0,081
Ouverture (ouv)	0,241 (0,32)	0,751	1,425 (1,75)	0,751
Taux de change (exc)	0,000416 (1,07)	0,286	0,0001 (0,24)	0,811
Taux d'inflation (inf)	0,00325 (0,37)	0,710	-0,007 (-0,60)	0,548
Capital humain (ch)	0,0504*** (3,22)	0,001	0,038** (2,59)	0,010
Population (pop)	3,068** (2,13)	0,033	1,784 (1,07)	0,285
Emploi (l)	-2,161 (-1,62)	0,105	-1,53 (-0,98)	0,327

© 2017 Global Journals Inc. (US)

Transferts financiers des migrants (tfm)	0,289 (1,37)	0,169	0,143 (0,57)	0,566
Investissements directs etrangers (ide)	0,188 (0,94)	0,345	0,281 (1,14)	0,252
Epargne domestique (edo)	-2,933 (-0,61)	0,542	-9,48 (-1,57)	0,116
Aide publique au développement (apd)	0,015 (0,63)	0,526	1,213*** (4,10)	0,000
Dette extérieure (dex)	-0,954*** (-2,94)	0,003	-0,784** (-2,37)	0,018
Apd.tfm.ide (terme interactif)			0,081 (1,01)	0,310
Test d'arellano et bond Ar (1) Ar (2)	 Z = 1,89 Z = -0,13	 0,058 0,896	 Z = -3,52 Z = -0,34	 0,000 0,735
Test de sargan	Chi2 = 394,31	0,430	Chi2 = 368,95	0,782
Statistique de wald	Chi2 =41,58	0,000	Chi2 = 62,19	0,000

Source : estimations de l'auteur

Nb : *variable significative a 10% ;
** variable significative a 5% ;
*** variable significative a 1% ;
Les valeurs entre parenthèses sont les z-statistiques des coefficients

Il est question de donner une interprétation du test d'auto corrélation d'arellano et bond (1991), du test de sur identification des instruments de sargan et de la statistique de wald relative a la validité globale du modèle.

Concernant le test d'auto corrélation, comme l'indique le tableau ci-dessus, la probabilité associée a ar(1) pour les deux estimations est inférieure a 10%. On conclut donc qu'au seuil de signification de 10%, il existe une auto corrélation sérielle d'ordre 1 des résidus. On passe dans ce cas au test d'auto corrélation d'ordre 2 des résidus qui est la seconde etape du test d'arellano et bond (1991). D'après les résultats obtenus, la probabilité adjointe a ar(2) des estimations est largement supérieure aux niveaux de signification différents (1%, 5% et 10%) donc on note une absence d'auto corrélation de second ordre des résidus.

S'agissant du test de sur identification de sargan, selon le tableau des résultats de l'équation sans ou avec terme interactif, le test de sargan a une p-value largement au dessus de 1%, 5% et 10%. On conclut donc que les variables retardées sont valides en tant qu'instruments. En d'autres termes, les instruments du modèle sont bien choisis. Il n'y a ni sur identification, ni sous identification des instruments du modèle.

La statistique de wald en ce qui la concerne permet de vérifier si le modèle final est bien spécifié et si les estimations ne sont pas fallacieuses. La probabilité de la statistique de wald obtenue dans le tableau des résultats est de 0,000, inférieure aux différents degrés de signification, donc, a chaque niveau de signification, le modèle estimé est globalement significatif.

En revanche, l'intérêt est egalement porté sur les signes et la significativité des variables. Le test de significativité des coefficients des variables se fait en utilisant la statistique z de la loi normale.

- Nous avons d'abord estimé l'équation financements extérieurs (apd, tfm, ide) croissance economique sans terme interactif apd.tfm.ide (colonne 2). Les résultats de cette estimation sont interprétés ci-dessous.

- Transferts de fonds des migrants (tfm)

Les tfm etant l'une des sources du financement extérieur, ont un intérêt particulier pour cette etude. Malheureusement, l'impact de ces derniers sur le taux de croissance economique s'avère etre non significatif. Ce fait se traduirait par l'utilisation dans cette etude, uniquement des envois de fonds comme mesure appropriée pour les tfm laissant de côté les deux autres composantes des tfm (la rémunération des salariés et les transferts de capitaux des migrants). De plus, le fait de ne pas prendre en considération des envois informels de fonds des migrants et les coûts de transferts elevés sont d'autres facteurs pouvant expliquer le faible volume des tfm. Ceci rejoint les conclusions du fmi (2005) selon lesquelles les tfm ont un effet statistiquement non significatif sur la croissance economique.

- Investissements directs etrangers (ide)

Tout comme les tfm, leside occupent une place prépondérante pour cette recherche. Leur effet sur la croissance economique est statistiquement non significatif. Leside ne sont donc pas indispensables dans l'explication du taux de croissance economique en

© 2017 Global Journals Inc. (US)

afrique au sud du sahara car il apparait clair que les pays de cette partie de l'afrique peinent a attirer ces flux de financement et par conséquent, les volumes d'ide qu'ils reçoivent sont très faibles par rapport a ceux reçus par d'autres régions. Les résultats de l'analyse sont similaires a ceux de marouane alaya (2004) pour qui la contribution des ide a la croissance economique en tunisie est positive mais pas pour autant significative. Ils sont aussi identiques a ceux trouvés par ngouhouo (2008) pour certains pays de la cemac.

- Aide publique au développement (apd)

L'impact de l'apd sur la croissance n'est pas significatif. Ce qui signifie que l'aide n'est pas une variable essentielle dans la promotion de la croissance economique en ass. Son volume semble encore etre faible pour booster de façon significative la croissance car la part de l'aide destinée aux pass a progressivement baissé a cause des guerres civiles, du retard dans la mise en œuvre de reforme et de la crise en asie du sud-est qui a entraîné la réduction de crédits aux pays en développement non directement affectés par la crise. Soulignons tout de même que l'inefficacité de l'apd en ass n'est pas due au problème de capacité d'absorption car il a eté démontré que cette aide n'a pas encore atteint son niveau de saturation, niveau au-delà duquel toute augmentation de l'aide devient néfaste pour l'activité economique. La région a donc la capacité d'absorber des ressources additionnelles d'apd.

Ces conclusions rejoignent celles de barro (1990) et amewoa (2008). Elles sont réconfortées par l'assertion qui avait eté faite par le secrétaire général des nations unies sur les omd en 2005. Selon lui, même si tous les engagements etaient honorés et que l'aide dépassait 100 milliards usd en 2010, ce montant serait encore loin du volume qu'on considérait comme nécessaire pour atteindre les omd.

Au terme de ces analyses, on remarque que les flux de financements extérieurs en particulier l'apd, les tfm et leside n'ont pas un très grand poids, voir même aucune influence a la limite sur la croissance economique en ass. Ils ne sont pas efficaces dans la promotion de la croissance economique car leurs impacts sont statistiquement non significatifs. Donc l'effet des financements extérieurs est nul sur la croissance economique en ass. Nu eté le manque de significativité de l'apd, des tfm et deside, les tfm seraient la source de financement extérieur qui aurait plus d'effets positifs sur la croissance (28,8%) suivis des ide classés deuxième avec 18,8% devant l'apd avec 1,5% au vu du signe de leurs coefficients respectifs. Ces conclusions sont similaires a celles de lahdhiri et hammas (2012) ou de benmamoun et lehnert (2013). Contrairement a ces auteurs, cette analyse montre que les coefficients de l'apd, des tfm et des ide sont non significatifs.

Il ressort tout de même que les variables qui doivent automatiquement etre prises en compte dans la relation financements extérieurs et croissance economique sont le revenu initial par habitant, le capital humain et la taille de la population car elles ont des coefficients significatifs et positifs.

- Lorsqu'on introduit la variable interactive apd.tfm.ide dans l'estimation (colonne 3 du tableau), les résultats sont presque similaires a la première estimation. Le terme interactif apd.tfm.ide qui est la raison d'être de cette equation n'a pas un coefficient statistiquement significatif (0,081). Force est d'admettre que les financements extérieurs ne stimulent pas la croissance economique des pass, même lorsque l'on combine leurs effets. Cependant, lorsqu'on s'arrête un instant sur le coefficient positif de cette variable interactive, on peut déduire que les financements extérieurs pourraient avoir un effet positif sur la croissance economique. Donc un accroissement de 100% des flux de financements extérieurs contribuerait a une hausse de 8,1% du taux de croissance economique, ce qui n'est pas significative.

Par contre, l'effet de l'apd se révèle positif et significatif en présence du terme interactif apd.tfm.ide. Ceci n'est pas surprenant car ce résultat conforte a bien d'égard la théorie du *big push* de rosenstein-rodan (1943) a savoir qu'il faut un montant substantiel de l'apd pour que son effet soit positif et statistiquement significatif sur la croissance economique. Les autres sources de financements extérieurs que sont les tfm et les ide a l'opposé de l'apd n'ont pas des coefficients statistiquement significatifs dans cette estimation similairement a la précédente. Ce ne sont donc pas des variables déterminantes dans l'explication de la croissance des pass.

Pareillement a la première estimation, le revenu initial par habitant, le capital humain et la dette extérieure sont significatives. La dette extérieure influence encore négativement le taux de croissance du pib par tête. Quant aux capital humain et a la dotation initiale, ils sont positivement liés a la croissance economique. Il s'agit en effet des variables essentielles dans l'estimation de la relation financements extérieurs et croissance economique. De façon laconique, les financements extérieurs ne contribuent pas a la croissance economique des pass.

VI. Conclusion

Dans cet article, on s'est attelé a faire ressortir l'effet combiné des financements extérieurs (apd, tfm, ide) sur la croissance economique des pass. Sur un panel dynamique de 23 pass, de 1985 a 2014, la méthode des moments généralisés de blundel et bond (1998) a eté utilisée. Nous avons estimé deux equations : l'une sans introduire le terme interactif et

© 2017 Global Journals Inc. (US)

l'autre avec intégration du terme interactif apd.tfm.ide. Force est de constater que toutes les variables impliquées dans ces estimations ont eté stationnaires. Cela explique pourquoi les tests de cointégration de pedroni n'ont pas eté nécessaires. De plus, une absence d'autocorrélation sérielle d'ordre deux des résidus a eté notée pour toutes les estimations. Les modèles ont eté d'une part, bien spécifiés et d'autre part, globalement significatifs.

A partir des résultats des analyses, il ressort egalement que les financements extérieurs de façon individuelle ou combinée n'ont aucune influence sur la croissance economique en ass, donc ne sont pas efficaces dans la promotion de la croissance economique. Cette conclusion contredit en fait la théorie des stades de la balance des paiements selon laquelle les capitaux extérieurs investis dans un pays permettent une croissance economique additionnelle.

Comment comprendre que les financements extérieurs qui sont supposés combler le déficit en epargne des economies de l'ass, en vue de promouvoir la croissance soient indécelables ?

Il ressort clairement que la situation de sous-développement des pays au sud du sahara ne s'explique pas par le manque de financements récurrents ou par l'absence de généreuses sources de financements. Il se pourrait que les citoyens voire les gouvernements de l'ass ne fournissent pas d'effort pour epargner. Ils dilapident les fonds a leur disposition parce qu'ils reçoivent ou espèrent recevoir continuellement une manne de l'extérieur. Il faudrait bien que cela puisse changer. Pour se faire, les pass devraient faire des efforts en matière de gestion des ressources financières, d'épargne, d'amélioration des conditions economique, politique et sociale.

Néanmoins, le fait que la croissance economique soit insuffisante pour eradiquer la pauvreté qui s'exacerbe en ass malgré les financements extérieurs ne veut pas forcement dire que ceux-ci sont a bannir complètement. Ce paradoxe est probablement lié entre autres a un environnement de *holdup* elevé qui caractérise les pass. Les choses seraient peut etre pires et la croissance relativement honorable des pass pourrait etre négative sans ces flux financiers.

En somme, les flux de financements extérieurs pourraient etre considérés comme un précieux complément des efforts locaux et non comme un elément déterminant de la croissance economique. Les pays africains doivent prendre leur destin en main et compter sur leurs propres efforts et potentialités.

Bibliographie

1. Ahmed j. Et martinez-zarzoso i., (2012); « blessing or curse: the stabilizing role of remittances, foreign aid and fdi to pakistan », development economic research group, gottingen university, germany.
2. Ajayi s., (2006); « fdi and economic development in africa », university of ibadan, ibadan, nigeria.
3. Alaya m., (2004) ; « investissement direct etranger et croissance economique: une estimation a partir d'un modèle structurel pour les pays de la rive sud de la méditerranée », ced, université montesquieu bordeaux, iv.
4. Amewoa k., (2008) ; « l'aide au développement aide t'elle le développement ? Le cas de l'afrique subsaharienne », thèse de doctorat es sciences economiques, limoges.
5. Bad, ocde, pnud, (2014) ; « apports financiers extérieurs et recettes fiscales en afrique », perspectives economiques en afrique.
6. Bad, ocde, pnud, (2015) ; « développement territorial et inclusion spatial », perspectives economiques en afrique 2015.
7. Baldé y., (2011); « the impact of remittances and foreign aid on savings/investments on sub-saharan africa », african development review, vol. 23, n_0. 2, pp 274-262.
8. Banque de france, (2009) ; « rapport annuel de la zone franc ».
9. Banque mondiale, (2014); « migration and development brief 22, migration and remittances: recent developments and outlook. », migration and remittances team, development prospects group.
10. Banque mondiale, (2014) ; « flux d'investissements directs etrangers en afrique subsaharienne », sciences, technologie et compétences pour le développement de l'afrique.
11. Banque mondiale, (2015); « migration and development brief 24, migration and remittances: recent developments and outlook. Special topic: financing for development », migration and remittances team, development prospects group.
12. Barro r., (1990); « government spending in a simple model of endogenous growth », the journal of political economy, vol. 98, n_0. 5, part 2: the problem of development. A conference of the institute for the study of free enterprise systems.
13. Benmamoun m. Et lehnert k., (2013); « financing growth : comparing the effects of fdi, oda and international remittances. », journal of economic development, vol. 38, n_0. 2, june.
14. Chauvin s. Et golitin v., (2010) ; « besoins de financement et viabilité de la dette extérieure dans les pays d'afrique subsaharienne », bulletin de la banque de france, n_0. 179.
15. Chen g., geiger m. Et fu m., (2015); « manufacturing fdi in sub-saharan africa: trends, determinants, and impact », world bank group.
16. Cnuced, (2014) ; « développement economique en afrique : catalyser l'investissement pour une croissance transformatrice en afrique », nations unies.

© 2017 Global Journals Inc. (US)

17. Cnuced, (2015) ; « rapport sur l'investissement dans le monde. Vue d'ensemble », nations unies.
18. Domar e., (1946); «capital expansion, rate of growth and employment », econometrica, 14, pp 137-147.
19. Driffield n. Et jones c., (2013); « impact of fdi, oda and migrant remittances on economic growth in developing countries: a system approach », european journal of development research 25, pp 73-196.
20. Fmi, (2014) ; « maintenir le cap, perspectives economiques régionales pour l'afrique subsaharienne et la cemac », département afrique, fmi.
21. Harrod r.f., (1942); « towards a dynamic economics: some recent development of economic theory and their application to policy», london, macmillan.
22. Hurlin c. Et mignon v., (2005) ; « une synthèse des tests de racine unitaire sur données de panel », janvier, 44 p.
23. Lahdhiri m. Et hammas m., (2012); « the effectiveness of external financing sources on economic growth case of the mena region », interdisciplinary journal of contemporary research in business, vol. 3, n_0. 9, january.
24. Ngouhouo i., (2008) ; « les investissements directs etrangers en afrique centrale : attractivités et effets economiques », thèse de doctorat en sciences economiques, université de toulon et du var, 299 p.
25. Rosenstein-rodan p., (1943); « problems of industrialization of eastern and south eastern europe», the economic journal, 53 p.
26. Tamokwe g., (2007) ; « cadre institutionnel et investissements des diasporas dans les pays en développement », antiopa/economica, actes de la conférence 2007.

© 2017 Global Journals Inc. (US)

Global Journal of Management and Business Research: B Economics and Commerce
Volume 17 Issue 2 Version 1.0 Year 2017
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Problems of Education and Preparation of Human Resources for Print and Publish Complex in the Conditions of the Central European Region

By Roman Šíp

University of Economics in Bratislava

Introduction- Labor market development in the printing industry reflects the errors that have occurred in education in 90´s of the last century. The education system based on the needs of print and publish complex, where students are bound by contract with a future employer is liberalized. Employers stopped promoting education, headquarters of industry disappeared, the Ministry was reoriented to knowledge-based society, where school leaving examination should be fully accessible and preparation of blue collar workers ceased to be attractive. So called, informative values were not required and the breakdown in education, which occurred in its whole nature manifested after twenty years. Centralized nationwide education in Bratislava started to have problems. Meantime the functioning system of education, providing qualified workforce began to shake in its existence. Dominant printing company in Slovakia prefers local education at the nearest high school, with students without any long-term perspective, backgrounds or insufficient educational qualifications.

GJMBR-B Classification: JEL Code: O15

PROBLEMSOFEDUCATIONANDPREPARATIONOFHUMANRESOURCESFORPRINTANDPUBLISHCOMPLEXINTHECONDITIONSOFTHECENTRALEUROPEANREGION

Strictly as per the compliance and regulations of:

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

Problems of Education and Preparation of Human Resources for Print and Publish Complex in the Conditions of the Central European Region

Roman Šíp

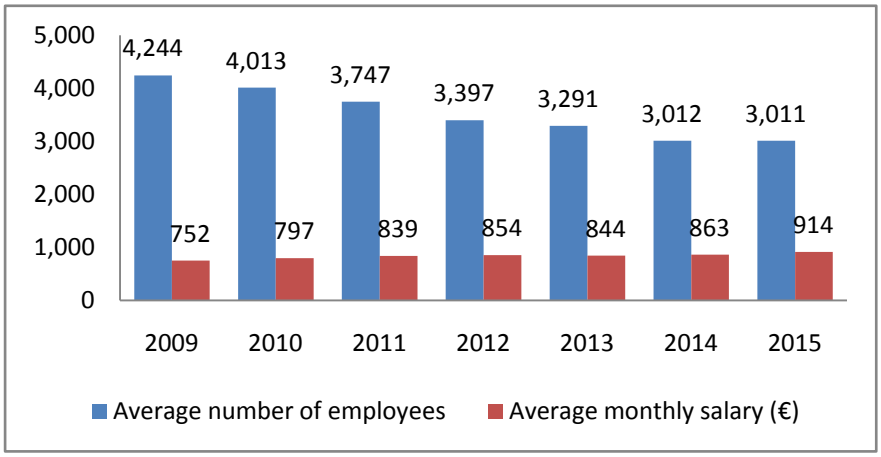
I. Present State of the Problem at Home and Abroad Theoretical Definition of the Problem

Labor market development in the printing industry reflects the errors that have occurred in education in 90´s of the last century. The education system based on the needs of print and publish complex, where students are bound by contract with a future employer is liberalized. Employers stopped promoting education, headquarters of industry disappeared, the Ministry was reoriented to knowledge-based society, where school leaving examination should be fully accessible and preparation of blue collar workers ceased to be attractive. So called, informative values were not required and the breakdown in education, which occurred in its whole nature manifested after twenty years. Centralized nationwide education in Bratislava started to have problems. Meantime the functioning system of education, providing qualified workforce began to shake in its existence. Dominant printing company in Slovakia prefers local education at the nearest high school, with students without any long-term perspective, backgrounds or insufficient educational qualifications.

Table 1: Printing industry in Slovakia

	2009	2010	2011	2012	2013	2014	2015	2016
Profit (million €)	279	297	298	263	263	255	247	248
Added value (million €)	78	79	77	71	63	62	70	65
After-tax profit (million €)	1	2	5	5	–5	–2	3	10
Average number of employees	4 244	4 013	3 747	3 397	3 291	3 012	3 045	2 882
Average monthly salary (€)	752	797	839	854	844	863	910	902

Resource: Statistical office of the Slovak Republic, https://slovak.statistics.sk/



Graph 1: Correlation between the number of employees and wages

Resource: Statistical office of the Slovak Republic, https://slovak.statistics.sk/

Author: Director of the Secondary Vocational Print and Publishing School, Bratislava, Slovakia University of Economics in Bratislava Faculty of Business Management Department of Production Management and Logistics Dolnozemská cesta 1/b 852 35 Bratislava Slovak Republic.
e-mail: sip@polygraficka.sk

© 2017 Global Journals Inc. (US)

It is noticeable nowadays that two generations of the professionals needed for natural reproduction of the print and publish complex are missing. There is a lack of skilled workforce at all job positions. This deficiency can´t be filled from day to day. The process of systematic preparation of the future qualified graduate takes at least four years.

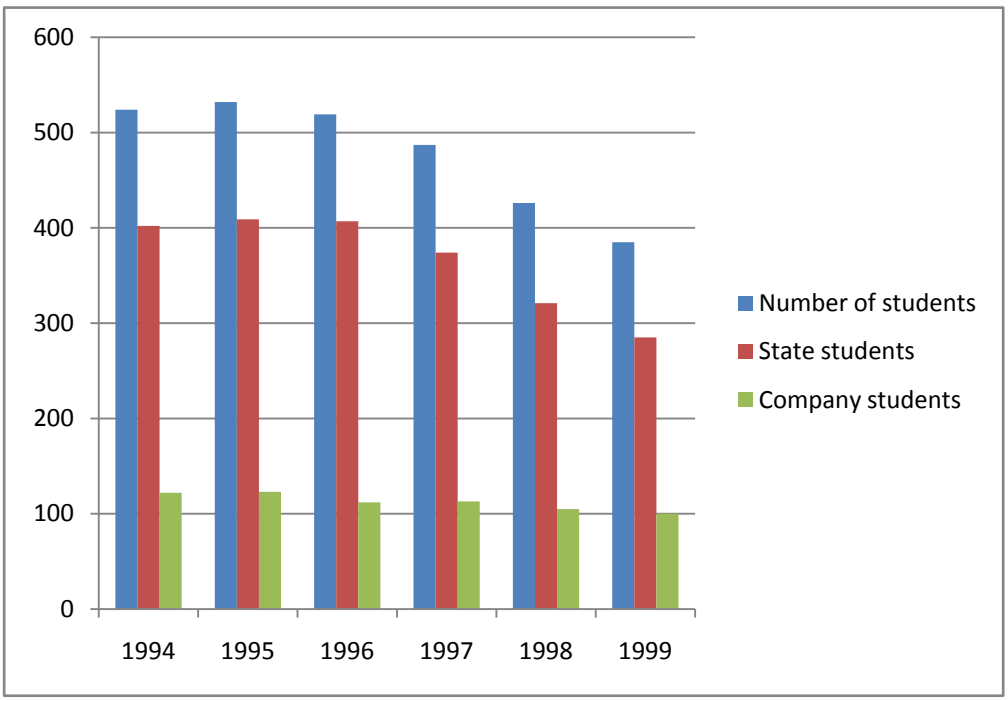
The planned system of education and preparation of the workforce in collaboration with personnel department of the employer is unknown. The priority of the human resources nowadays is to contract unskilled workforce and temporary workers for afternoon and night shifts. It was caused by all those who did not accept the importance of education for the needs of printing industry as the significant investment for the future. While education was and still is the foundation for growth of the prosperity and creation of opportunities.

Table 2: Number of students preparing for the print and publish complex before 2000

Year	1994	1995	1996	1997	1998	1999
Number of students	524	532	519	487	426	385
Company students	122	123	112	113	105	100

Resource: Kováč, L.: The Secondary Vocational Print and Publishing School, Bratislava.

Managers at all levels of print and publish complex were aware that investment into poor local communities with denial for the value of education did not have long-term rational basis. At the end of their productive age, employees of printing companies often became teachers of students. Machinery equipment was limited to the printing machine, which was eliminated in production destined for scrapping. This development went even further, in the form of severe degradation of education. Slovakia has currently around 30 schools offering education in the field of study 3447 digital media graphic designer. Leaders in printing industry are responsible for poor state of education of the workforce in the printing industry.



Graph 2: Development of the number of students in 1994 – 1999

Resource: Kováč, L: The Secondary Vocational Print and Publishing School, Bratislava.

Decisions of management control of employers in the field of human resources were wrong in the early 90´s. Decisions did not take into consideration the needs in terms of filling short term performance of companies and it led to an alarming shortage of skilled labour in terms of long term needs. In the short term the lack of workforce at labour market were solved with higher wage by the employers. Because of this it comes to migration of employees in 2000. An absence in the structure of the training and education of employees and discord between the future need and reserves in personnel policy has appeared.

Overall the planning of human resources in line with the fulfillment of production targets has failed. It

© 2017 Global Journals Inc. (US)

lacks any planning for needs or eventually for surplus of workforce that would achieve the necessary labour potential. In this case the control of requirements and basic planning of human resources in print and publish complex failed.

The absence of planning of human resources and determining the needs of employers do not reflect changes in the transition from analog to digital technology. Company headquarters failed to predict the requirements for the future reproduction of the workforce in accordance with the organization of work and introduction of new technologies. The amount of performed work was not enough oriented on qualification of employees.

There is no planning of the needs of human resources for this field because of the dissolution of the directorate – General VHJ of Slovak printing in the early 90´s without existence of any full-value successional organization within the printing industry. Today, after 25 years we reveal that market did not solve the problem of qualified workforce. Employers were neither willing nor forced to solve the problem of qualified workforce for positions of offset printing machine operator (printer), bookbinder, process engineer, cost clerk and marketing employee. The lack of company students in the last twenty years is the consequence (*Table 7*).

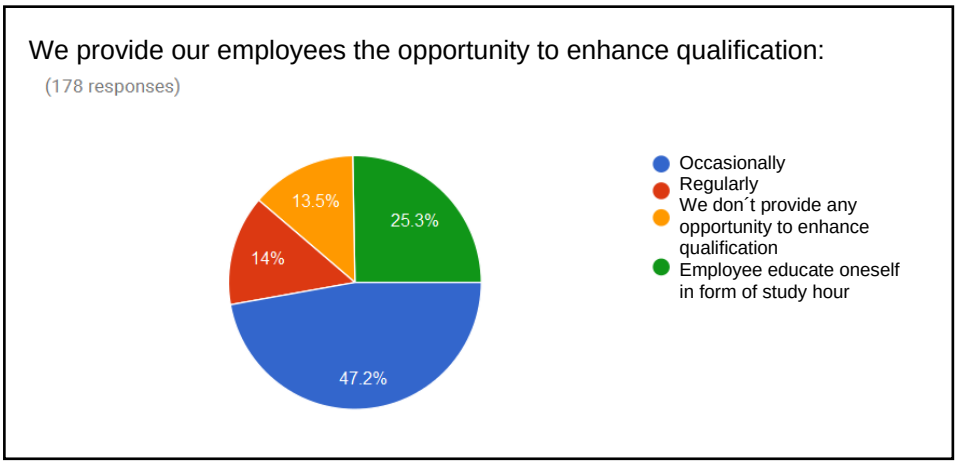
Analysis of the age structure of employees warns us about the employment of older generation with the expectation of retirement. We observe this state in the field of vocational education as well. The professional teaching employee needs to have a certificate of apprenticeship in a relevant field, university degree and must have a supplementary pedagogical study to fulfill the qualification requirements. There was always lack of people willing to undergo this process of self-long education within the fields of No.34 Printing Arts & Media. The current age limit of teachers is fifty without succession of the younger generation. The teachers qualified to teach are retiring and there is no replacement for them in teaching staff. The missing personnel policy of employees in the field of print and publish complex causes following consequences:

The missing personnel policy of employees in the field of print and publish complex causes following consequences:

- The lack of systemic management approach,
- Failure to take account of the transformation process of change of inputs and outputs,
- Downfall of control of all activities taking place in the organization,
- Lack of personnel policy which causes the failure of two generations of professionals who would be able for the vacant jobs,
- The reluctance of employers to participate in vocational education and to consider educated workforce to be a competitive advantage,
- Accept the dual system of education as an alternative to long-term solution of reproduction of the workforce.

We reveal in accordance with the results of research (*Graph 3*), that employers don´t provide their employees with sufficient opportunities to:

- Upgrading skills,
- Retraining,
- Acquisition of new technologies.



Graph 3: Attitude of employers to the education of workforce in print and publish complex

Resource: Own research.

This implies that in the field of development of the workforce there isn't sufficient emphasis on developing knowledge and skills that would lead to systematic education. Employers don´t provide their employees the career growth, which would lead to future decrease of work performance in the company´s potential. Some companies will have to reduce production capacity and reject the orders due to labour shortage. The employers will face a shortage of skilled workforce in the near future. If the employers will not fulfil the need for radical changes in the system of work of personnel department in the short period, jeopardize the

© 2017 Global Journals Inc. (US)

fulfillment of their manufacturing objectives. The plan of educational activities must reflect the real long-term needs and not to be limited to compulsory training only (Graph 3). Research reveals that the 14% of respondents don´t provide their employees any training and 25% of employers leave the up skilling in the hands of their employees. Only 14% respondents of research claim that they provide regular training for their employees. It is assumed that these trainings are systematic and planned.

II. Research Results and Their Interpretation

The problems associated with systemic management of human resources within the print and publish complex is not possible to describe only by one basic method. Issues related to workforce together with the results of the research give enough space for opportunity of reflection and training of new employees. The requirements of employers in the print and publish complex for human resources forced top management to formulate hypotheses of urgent solution of their shortage.

a) Implementation and methodology of research

The research was conducted through a questionnaire with a focus on finding facts influencing human resources, preferences of management behavior and process management in the print and publish complex (178 print and publishing organizations, 2 750 e-mail address).

The questionnaire contains 11 questions.[1] The respondent fills the field of business, number of employees according to the classification of European Union, head office by the regions in Slovakia. Likert scale was used according to themes for drawing up the scales of the questionnaire.[2]

To obtain the greatest number of employers, questionnaire was conducted using the Google Form. The questionnaire was sent out in the between July and December 2016. Pivot tables, frequency tables and graphs were used for the processing of all responses in our questionnaire. Quantitative analysis is done in order to acquaint employers with current issues. Solution to reduce labour shortage for the next 10 years is drawn as well.

The complete questionnaire is stored in electronic form on the server: https://docs.google.com/forms/d/ 1PDbwspjw WoGCYpjt Wb4 ot Ls7LXHa 71ZEX9AdsZ3F_rs/prefill

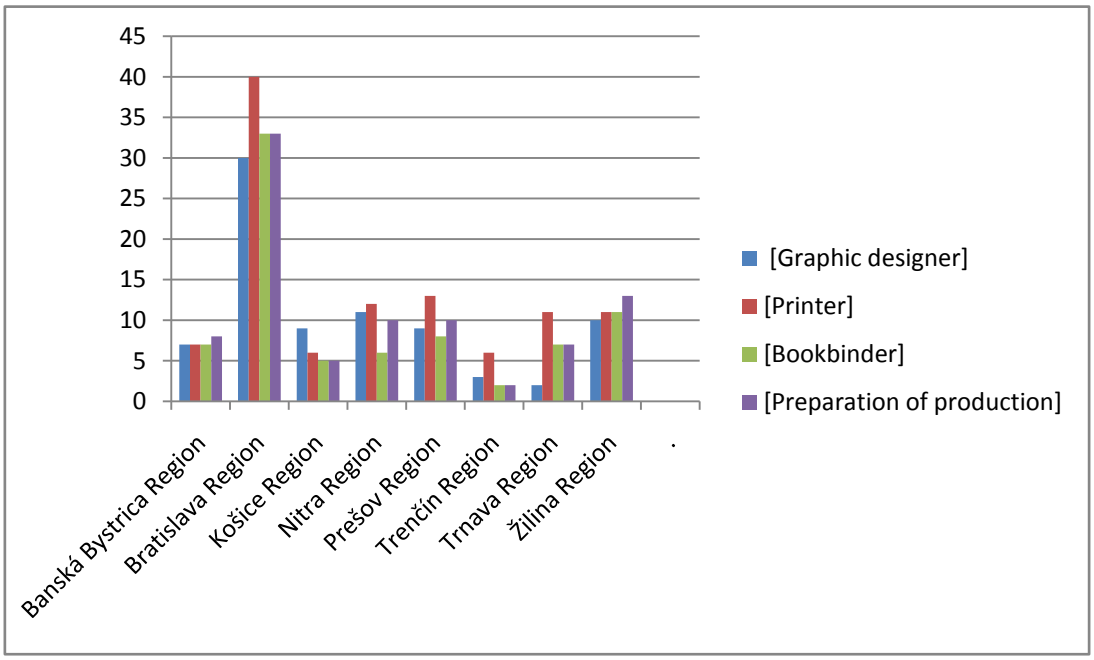
Requirements of employers we investigated to find skilled workforce educated at the secondary school and at the same time its current disposable status through the question focused on the needs of the labour market in the next three years. The result is a finding of lack of human resources preparing for the labour market needs. From demands for workforce in different region of Slovakia Bratislava Region represents more than 1/3 in all professions. The requirement correlates with the distribution of employers in Slovakia. This implies that the largest grouping of employers in the print and publish complex is concentrated exactly in this region. Graph 4 highlights the fact of uneven intensity of allocation of human resources. Almost in all regions is the dominant requirement for the position of printer on the first place.

The requirements of employers for employees in key positions working in Slovakia are the same as in the Czech Republic. This results from the meeting of the executive committee of the Association of printing industry in Slovakia and the Union of Printing Entrepreneurs in Hodonin (Czech Republic) in the autumn of 2016. The advantage of the educational system in the Czech Republic is that the bookbinder of finishing production can be educated in the field of study ended with school leaving examination, on the other hand in Slovakia is possible only the education in the field of study ended with certificate of apprenticeship. Such possibility of the three-years vocational study is in current situation unattractive in Slovakia. To create a class in accordance with § 33 of Act 245/2008, par. 7 point. a) minimum of 17 students is for this field of study impossible.

[1] Richterová, K. a kol. 2013. Úvod do výskumu trhu. Bratislava: Sprint 2 s.r.o. 2013. 316 p. ISBN 978-80-89393-95-4.

[2] Gavora, P. 2012. Tvorba výskumného nástroja. Bratislava: SPN. ISBN 978-80-10-02353-0.

© 2017 Global Journals Inc. (US)



Graph 4: The requirements for skilled workforce in regions of Slovakia in the next 3 years

Resource: Own research.

Table 3: Cross table of the labour market needs by region in the next 3 years

Profession	Preparation of production	Graphic designer	Printer	Bookbinder
Banská Bystrica Region	9%	9%	7%	9%
Bratislava Region	38%	37%	38%	42%
Košice Region	6%	11%	6%	6%
Nitra Region	11%	14%	11%	8%
Prešov Region	11%	11%	12%	10%
Trenčín Region	2%	4%	6%	3%
Trnava Region	8%	2%	10%	9%
Žilina Region	15%	12%	10%	14%
Total sum	**100%**	**100%**	**100%**	**100%**

Resource: Own research.

Printing companies will have the biggest shortage of required workforce in the next 3 years (*Graph 5*). The situation is caused by the breakdown of students in the education system who would be prepared for position of bookbinder and printer. The profession is not attractive for pupils and parents. Employers did not have motivation to systematically support the education and to ensure the reproduction of workforce as in the 90´s was relatively sufficient with workforce. The training of young people was for employers expensive item, which was at that time abolished (*Graph 2*) and there was no company student preparing for their future profession at the beginning of the millennium (*Table 7*).

© 2017 Global Journals Inc. (US)

Table 4: Cross table of requirements of employers for workforce in the print and publish complex in the next 3 years

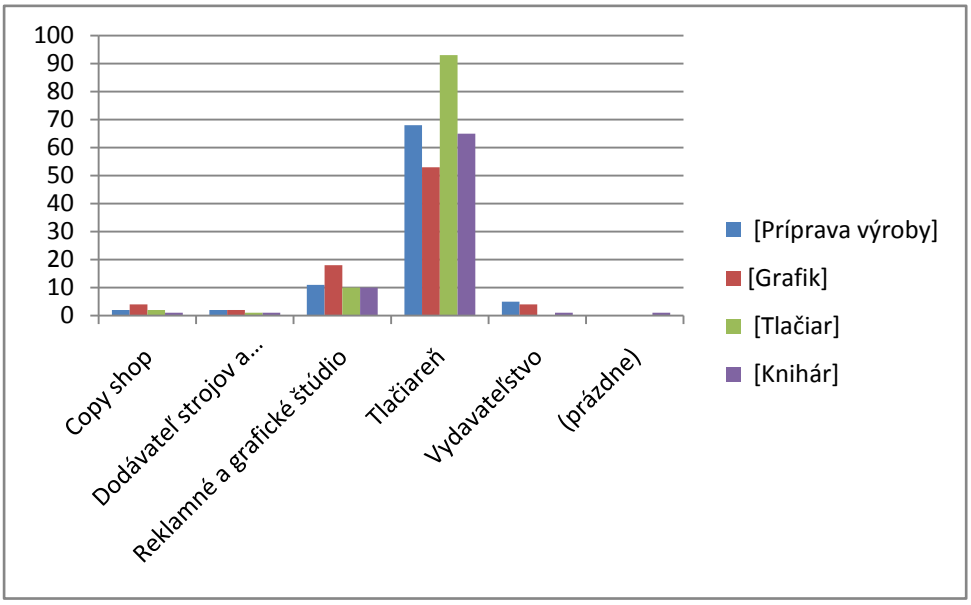
Tag Lines	Preparation of production	Graphic designer	Printer	Bookbinder
Copy shop	2%	5%	2%	1%
Supplier of machinery and materials for the printing industry	2%	2%	1%	1%
Advertising and graphic studio	13%	22%	9%	13%
Printer industry	77%	65%	88%	82%
Publishing company	6%	5%	–	2%
Total sum	100%	100%	100%	100%

Resource: Own research.

There is currently negligible number of students at the secondary vocational schools who are preparing in the field of studies required by the employers or students are not preparing already several following years at all. The state of reproduction of workforce is alarming.

This acute shortage of skilled workforce refers to graduates in the field of study 3457 K offset printing machine operator and 3473 H 08 bookbinder. Both fields were neglected in terms of marketing activities and educational system in collaboration with parents failed to ensure future vacancies for students.

Partial success is the training of students for the preparation of production (marketing staff, cost clerk, technologist, scheduler norm). There has succeeded in the field of study 3431 M 01 printing technology (preparation of production) to preserve the continuity of eighty years and to systematically educate and fill mentioned job positions for the need of labour market (*Graph 5*). Lack of qualified workforce for job positions in the preparation of production is not as significant as in other job positions. It may be caused by technological change in the last twenty years when those positions were filled by graduates of other related fields of study, such as a group 34 printing and media (engineering, informatics).



Graph 5: The application of secondary vocational schools within print and publish complex in the next 3 years

Resource: Own research.

From the perspective of the current preparation of students the expected requirement of employers for vacant place for job positions in the preparation of production in the next 3 years will be filled. Graduates will be effectual ready for publishers, advertising and graphic studios, agencies and copy shops. From references of suppliers of consumables and machines we have information about application of graduates of the field of study 3431 M 01 printing technology (preparation of production) at the positions business man as well.

© 2017 Global Journals Inc. (US)

Table 5: The requirements of employers for workforce by region in the next 3 years

Profession	Preparation of production	Graphic designer	Printer	Bookbinder
Banská Bystrica Region	85	35	90	105
Bratislava Region	190	210	325	305
Košice Region	30	50	35	25
Nitra Region	50	55	65	30
Prešov Region	55	50	80	55
Trenčín Region	10	15	30	10
Trnava Region	35	15	55	35
Žilina Region	65	55	100	80
Total sum	**520**	**485**	**780**	**645**

Resource: Own research.

Problems of education in relation to the reproduction of the workforce did not avoid the International Bill 12 seminar focusing on screen printing and digital printing at October 8, 2016 inČeský Krumlov (Czech Republic). The contribution of Iveta Ochrankova under the name the teacher´s view of preparation of a student of graphics design[3] described the current state. The question of workforce resonates at international level and is highly actual for professional unions.

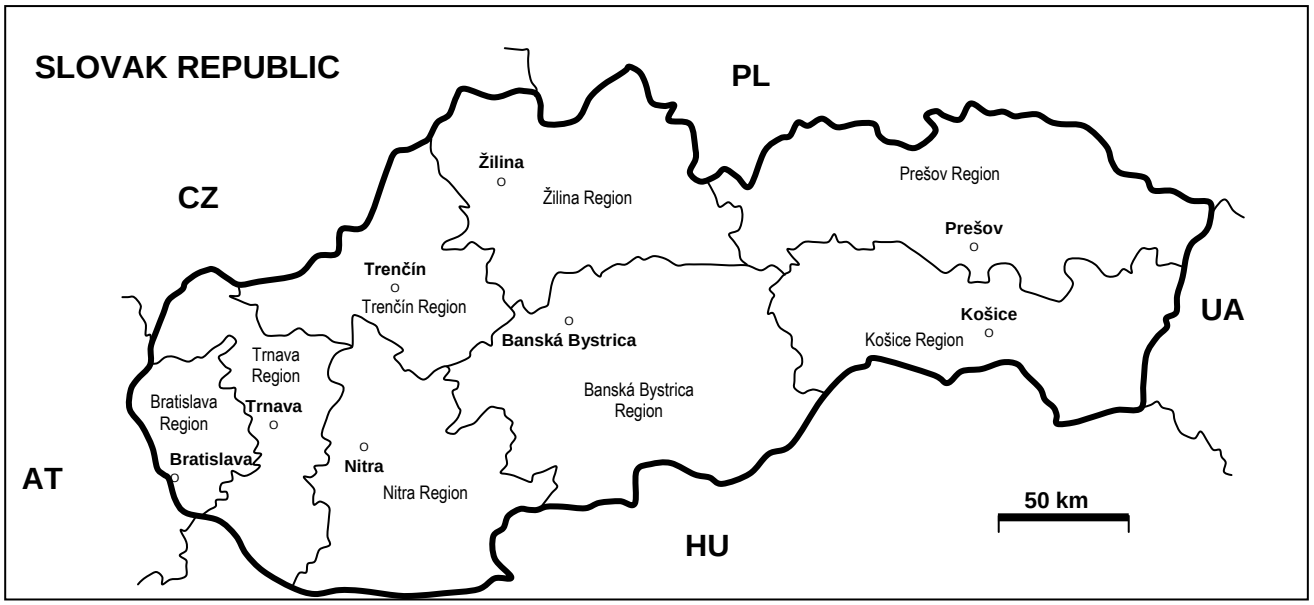
Companies operating outside print and publish complex are already limiting investments due to lack of workforce. To fill vacant positions would take ten years.[4] In the Czech Republic 86% of companies have problem to find workers with vocational certificate.

Employers in the Czech Republic want after model of Germany and Austria to introduce system of dual education (SDV) which should adapt the plan of production of schools to labour market´s requirements. Poland has similar problems with qualified workforce.[5] It operatively responded to labour market´s requirements and recruited foreign workers. But this step doesn´t solve reproduction of workforce but commonly saves an acute shortage of workforce which was not solved a long time.

In Slovakia there became an important legislative assumption for adjusting of principled and systematic bases of dual education the Act. 61/2015 about vocational education and training.

[3] Ochránková, I.: The teacher´s view of preparation of a student of graphics design, Medzinárodný seminár Bill 12, 8th October 2016.
[4] Weikert, P.: Ordnung muss sein. Mladá fronta a.s. Euro 50, 12.12.2016.
[5] Weikert, P.: Ukrajinci, vítejte. Mladá fronta a.s. Euro 49, 5.12.2016

© 2017 Global Journals Inc. (US)



Map of Slovak Republic and Regions

b) Suggestion of the solution of the situation and final recommendations

There is 2 935 kindergartens, 2 113 primary schools and 868 secondary schools in Slovakia with cca 89 000 pedagogical employees. Primary schools educate 450 000 pupils which is about 210 pupils per school. 270 000 pupils study at secondary schools which is cca 300 pupils per school. There are about 150 primary schools where study from 10 to 50 pupils and about 50 secondary schools with the number of students under 150. About 500 schools are so called "small classes". There are 36 public universities and high schools in Slovakia as well where study 135 000 students.

Table 6: Allocation of the population in education to the age of 20

	Number of schools	Number of pupils	Average
Nursery school	2 935	–	–
Primary school	2 113	450 000	210
Secondary school	868	270 000	300

Resource: Statistical office of the Slovak Republic, https://slovak.statistics.sk/

If the employers will not approach education of the workforce constructively, they won't be capable of redeveloping the current changes in the labour market. Ageing population is a problem in the European Union. There will be more people retired in the next ten years and there won't be sufficient number of qualified workforce for positions of printer and bookbinder. The soon to be retired employees need to be replaced in a relatively short time. The transmission of knowledge and experiences between the outgoing and incoming generation will be important. More and more employers replace qualified workforce in the production with the unqualified in time bypassing of the actual situation. Unsystematic solution of staff assurance creates situation in which unqualified workforce of production line train future operation of the line. The solution is immediate investment in education.

Even cooperation with primary school in the field of preparation for future perspective employment can be carried out in various informal projects. There is a long-term incentive of employers to have a connection among pupils, parents and employers. It is preferentially necessary to make profession attractive that has future in the field of education for studies 34 printing and media. The result of this collaboration is marketing oriented at pupil and parent which leads to the contract with the employer. It becomes a springboard for study at secondary school.

There are following forms of study available at the secondary school today:

- State,
- Private,
- Dual system of education.

Collective education of staff can be regarded as extension of the whole system. The need of education of employees should be for employers the periodically repeated certainty.

The Secondary Vocational Print and Publishing School/SOŠP/ www.polygraficka.sk as the only school in Slovakia offers specialized comprehensive education in the fields of study 34 printing and media. Graduates

© 2017 Global Journals Inc. (US)

cover job positions from middle to top management of companies. The school continues in this tradition and provides well secondary education as well as vocational post-secondary studies and lifelong education.

In the creation of school educational programs the school prefers such educational processes where graduates of the fields of study 34 printing and media fulfil standards for versatility in the whole European Union.

Table 7: Number of students preparing for the print and publish complex in the current period at SOŠP

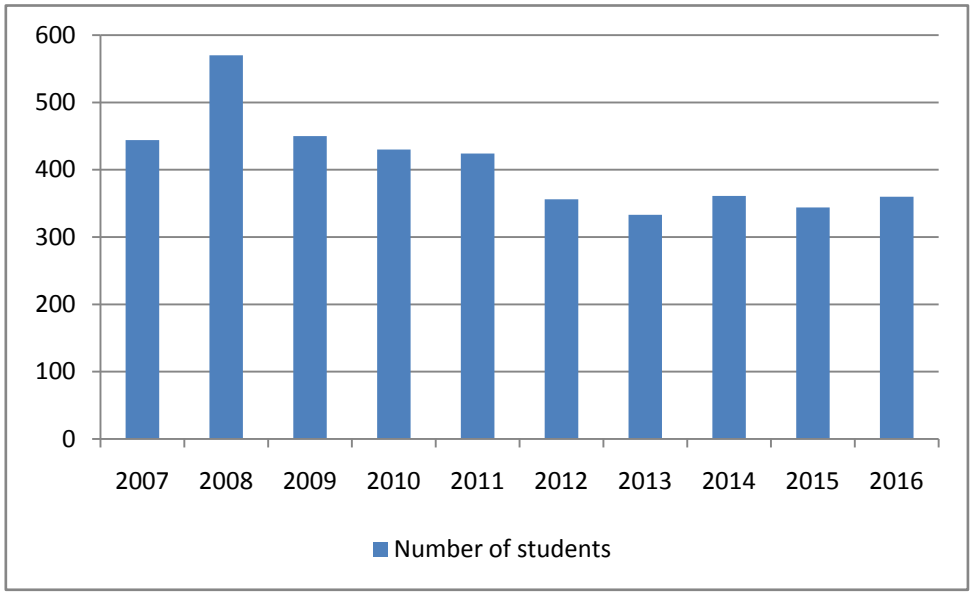
Years	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total number of students	444	525	570	450	430	424	356	333	361	344	360
Company students	–	–	–	–	–	–	–	–	–	–	–

Resource: Šíp, R.: The Secondary Vocational Print and Publishing School, Bratislava.

The main objective of Secondary Vocational Print and Publishing School for the next period is to insure preparation of vocational staff for all printing occupations and occupations dealing with processing of digital information for media and at the same time to act as a center of vocational education and training in area of print and media. Vocational education and training of students tend to gain such knowledge which will be in conformity with the requirements of labour market and requirements of employers. Constantly increase of qualification of vocational pedagogical employees need to be connect with suppliers of technology and materials.

The tradition of schools to direct vocational education and training of area of printing and media is also reflected in close connection with employers in the field of printing industry.

The school has remained part of the employers' associations of the printing industry and the Association of printing industry in Slovakia, where the school is a member since its establishment to the present day, also after 1991 when the founding function has passed toward the school from print and publishing company on the resort of industry and subsequently on the Bratislava Self-Governing Region. At the same time it is member of the Slovak Chamber of Commerce and the Association Union of Employers of the Slovak Republic. These institutions are the guarantor of expertise by school leaving examinations where they carry out direct supervision.



Graph 6: Development of the number of students in the last six years

Note: For 2017 it is estimated number of graduates

Resource: Šíp, R.: The Secondary Vocational Print and Publishing School, Bratislava.

There are operating other 28 schools in Slovakia in addition to this secondary vocational school whose documentation are based on the state educational program but don´t provide a comprehensive education for all fields of study.

The disadvantage of these schools is that their overall orientation is for other fields of study and don´t educate the students comprehensively for the area 34 printing and media.

© 2017 Global Journals Inc. (US)

c) *The system of dual education as an alternative for employers*

An effective solution for the future seems to be the introduction of dual education (SDE) in the issue of the lack of human resources in terms of print and publish complex. The legislative requirement for the application of SDE describes Act. 61/2015 Z.z. of vocational education and training and about the change and complement of some laws. Employers and company management have the experience with this system from the past and for many of them was till 1983 a natural source of reproduction of the workforce. In some of the form of the vocational education it is applied in the form of an external experience by an employer for the fields of study 34 printing and media. The advantage is that the student is prepared for the job position under real conditions by the employer. So they obtain work habits and skills during their studies and they are naturally integrate into the team of the future employer.

The advantage of the employer is to have the opportunity to actively enter into the process of training and the creation of school educational programs. Education and development enable to involve students under the guidance of instructors already in the second class into the productive work. At the same time the employer is heading a financial and motivational evaluation for the future qualified workforce already during the education.

With the introduction of SDE occurs a fundamental change in the view of obtaining the students. Employers have to concentrate on cooperation with counselors at primary schools. Activities should be directed to:

– Career counseling,
– Awareness within the regional labour market,
– Importance of technical fields for versatility in the future,
– Engaging the students in technical works.

For the future of the fields of study 34 printing and media is necessary that employers will realize within their scope activities related to the promotion of vocational education. Promotion has to be oriented to the students and parents already in the primary schools. The current request becomes a project of promotion of trade unions and orientation for future employment. The main task of the Association of printing industry in Slovakia, as a professional body, is still the monitoring and creation of a database of vacancies and requirements for human resources in order to clarify the labour market

Resources

1. Blubla, P. 2012. Súčasný stav a výhľad ďalšieho rozvoja polygrafie. Zväz polygrafie na Slovensku. Martin, 4. apríl 2012.
2. Gavora, P. 2012. Tvorba výskumného nástroja. Bratislava: SPN. 2012. ISBN 978-80-10-02353-0.
3. Kachaňáková, A. 2007. Riadenie ľudských zdrojov. Bratislava Sprint vfra. 2007. 208 p. ISBN 978-80-89085-83-5.
4. Majtán, M. 2009. Projektový manažment. Bratislava: Sprint dva. 2009. 300 p. ISBN 978-80-89393-05-3.
5. Majtán, M. a kol. 2016. Manažment. Bratislava: Sprint 2 s.r.o. 2016, 408 p. ISBN 978-80-89710-27-0.
6. Majtán, Š. a kol. 2014. Podnikové hospodárstvo. Bratislava: Sprint 2 s.r.o. 2014. 324 p. ISBN 978-80-89710-05-8.
7. Samuelson, P. A. – Nordhaus, W. D. 2009. Economics. 19th Edition. New York McGraw-Hill Inc. 2009. ISBN 978-007-351129-0.
8. Strážovská, H. a kol. 2016. Malé a strené podnikanie. Bratislava: Sprint 2 s.r.o. 2016. 324 p. ISBN 978-80-89710-21-8.
9. Ministry of Education, science, research and sport of the Slovak Republic: Správa MŠ k SDV: Vyhodnotenie skúseností 1. roka zavádzania systému duálneho vzdelávania a prípravy. 2016.

© 2017 Global Journals Inc. (US)

Global Journal of Management and Business Research: B Economics and Commerce
Volume 17 Issue 2 Version 1.0 Year 2017
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Front-End Activities Promote Front-End Performance?—The Moderating Effect of Front-End Uncertainty

By Cao Yong, Md Shariful Islam, Sun he-lin & Md. Eanamul Haque Nizam

Wuhan Textile University

Abstract- This study selected Chinese manufacturing parts industry employees as the research object, through questionnaire investigation, empirical analysis of fuzzy front end (FFE) of new product development (NPD) performance mechanism, and focus on the front end performance intermediary role between the two. The FFE activity has a positive effect on the front-end performance; uncertainty between Learning Strategic and front end performance has a negative moderating effect; uncertainty has a negative moderating effect between Stakeholders and involvement front end performance. Uncertainty has a negative moderating effect between Information collection and front-end performance. The research results not only have theoretical implications for the in-depth study of the management of fuzzy front-end activities, but also have important practical significance for the development of the new product development in china.

Keywords: fuzzy front end; new product development; front-end activities; uncertainty; moderating role.

GJMBR-B Classification: JEL Code: M10



Strictly as per the compliance and regulations of:

© 2017. Cao Yong, Md Shariful Islam, Sun he-lin & Md. Eanamul Haque Nizam. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons. org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Front-End Activities Promote Front-End Performance?—The Moderating Effect of Front-End Uncertainty

Cao Yong [α], Md Shariful Islam [σ], Sun he-lin [ρ] & Md. Eanamul Haque Nizam [ω]

Abstract- This study selected Chinese manufacturing parts industry employees as the research object, through questionnaire investigation, empirical analysis of fuzzy front end (FFE) of new product development (NPD) performance mechanism, and focus on the front end performance intermediary role between the two. The FFE activity has a positive effect on the front-end performance; uncertainty between Learning Strategic and front end performance has a negative moderating effect; uncertainty has a negative moderating effect between Stakeholders and involvement front end performance. Uncertainty has a negative moderating effect between Information collection and front-end performance. The research results not only have theoretical implications for the in-depth study of the management of fuzzy front-end activities, but also have important practical significance for the development of the new product development in china.

Keywords: fuzzy front end; new product development; front-end activities; uncertainty; moderating role.

I. Introduction

Economic globalization promotes the development of technology and business competition, innovation is the basis of long-term survival and development of enterprises, and a steady stream of creative sources is an important guarantee to maintain long-term competitive advantage. Fuzzy front end (FFE) is an important stage in the generation and screening of creativity, which has an important impact on innovation success and reducing R & D costs (Kien et al., 2001).

Cooper and Kleinschmidt (1994) studies show that the implementation of quality front-end activities and entered the development stage of the product before the project full definition and planning in enterprise new product development (NPD) play a crucial role in the process of. Therefore, the enterprise should effectively develop, cultivate and manage the front-end innovation activities to achieve good front-end performance. The existing researches on FFE mainly focus on the following four aspects: the definition and characteristics of FFE, the front-end performance and its mechanism, FFE and new product development performance, based on specific industries and products. The definition and characteristics of FFE is the basis for the follow-up study of FFE; the front-end performance is the direct result of changing the front-end activities through various management methods; NPD performance is affected by the front-end performance (Zhai, 2014). The key point of NPD's success lies in the "front-end activity", especially in the early development of the market related activities, the success rate of the NPD project is proportional to the time spent in the FFE phase (Cooper, 1988). However, FFE is the weakest link in the process of product innovation, the implementation of the front-end of the project innovation plays a decisive role, and affect the level of product quality, cost and time limit of the length to a great extent (Khurana and Rosenthal, 1997). Markham (2013) believes that most of the value of the new product is created in the front-end stage, the more mature the front-end program, NPD will be more successful. At the present stage, many managers in China are not fully aware of the concept and process of the fuzzy front end, and the front-end activities and their management have not been paid much attention to in the practice of NPD. What are the important effects of front-end activities on the performance of the front end, and whether the effective management of front-end activities directly affects the NPD performance is an important issue in the research field. This study is based on the theory of open innovation, from the creative source perspective, the front ends is divided into internal and external activities, focus on the relationship between the front and front end performance, and discusses the uncertainty in the regulatory role between front-end activities and front end performance for the first time. Under the background of building an innovation oriented country in China, it is more forward-looking, theoretical and practical value to select the front-end activities management of NPD project in manufacturing enterprises. The research results not only have theoretical implications for the promotion of front-end performance, but also have important practical significance for Chinese manufacturing enterprises to effectively manage NPD front-end activities.

Author α: School of Management, Wuhan Textile University and also Hubei Textile Policy Research Centre, Wuhan, P.R. China, 430072. e-mail: caoyong@mail.hust.edu.cn
Author σ ρ: School of Management, Wuhan Textile University, Wuhan, P.R. China, 430200. e-mail: 3318636778@qq.com
Author ω: School of Fashion, Wuhan Textile University, Hubei Province, Wuhan, China. e-mail: md.eanamulhaque@gmail.com

© 2017 Global Journals Inc. (US)

II. Literature Review and Hypothesis

a) *Fuzzy front end*

The new product development process is usually divided into three stages: fuzzy front end, project implementation and commercialization. The fuzzy front end refers to the early stage of New Product Development, roughly covers the idea generation project business plan is approved or termination of the development period, including the product idea generation and selection, concept development and definition, business plan and design (Khurana and Rosenthal, 1997). FFE stage management plays a decisive role in the successful implementation of new product development projects. Uncertainty refers to the difference between the amounts of information that an organization needs to perform a specific task. In order to reduce the uncertainty of FFE, it is necessary to collect a large amount of relevant information in the process of new product development. Research shows that, more reduction in the front-end stage of specifications is uncertain and product definition phase deviation follow-up projects are smaller, and the greater success rate of New Product Development (Souder and Moenaert et, 1992; al., 1995). In addition, Cooper (1988) points out that after the implementation of project, the commercialization of the new product will be successful and the mechanism of the fuzzy front-end stage technology and market uncertainty reduction needs to be further studied.

The fuzzy front end of uncertainty, the existing research has not yet formed a unified definition of standards. Different scholars from the perspective of division of the front stage of uncertainty, such as Lynn and Akgun (1998) pointed out that the uncertainty mainly comes from two aspects of market and technology. Kim and Wilemon (2002) think that this uncertainty comes from technology, market demand, resources and organization ability. Brun (2009) from the "theme" and "source" two aspects of division of uncertainty, the "theme", including product market, process and resources, on the other hand "source" mainly includes multiple meanings, novelty, effective and reliability. Souder and Moenaert (1992) that the front stage of uncertainty mainly for the demand, technology, competition and the required resources and other aspects of the uncertainty (O'Connor and Rice,2013) divided into market uncertainty, resource uncertainty, organizational uncertainty and technical uncertainty. Cao et al.(2016) from the market, resources, organization and technical uncertainty, such as four aspects to explore the impact of the fuzzy front end of new product development performance.

b) *Front-end activities*

The strategic planning and opportunity recognize are the input of FFE and the specific project plan are the output by the FFE. This construct the FFE input and output model, pointed out that the front-end activities including task processing, concept formation, concept selection, concept definition, business analysis and project plan. (Nobelius and Trygg, 2002). Yu et al (2004) said that there are two main types of front-end activities: one is planning, including with product planning and project planning; the other one is related to creativity, including with creative production, creative development and creative assessment. According to Chen and Gao (2005) suggested about improving the front-end activities from the six aspects of development strategy such as new ideas, organizational activities, supplier involvement, customer participation, feasibility analysis and to reduce the ambiguity level as per the front end theory. It improves the performance of complex product significantly. In addition, the innovation of enterprise culture or atmosphere will affect the enterprise for creative collection or the degree of attention between NPD project team communication level and creativity will affect the project team and other departments of the enterprises are also affected. Markham (2013) believed that the front series of activities include the effects of preparation process, front-end resource supply and the front lead user has completed. The sequence of activities such as consensus on the front end performance was made and then found that the implementation of front-end control cost and eliminate the formal process of project. Although the literature suggests some front-end activities but without considering the various activities of the interaction, there is no scholars or managers pointed out what major activities have a positive impact on the performance of the front. On the basis of the existing research, including the actual China manufacturing enterprises mainly involved for the both main supplier and customer participation. The main front end activities are at the same time choosing internal subjects including learning strategy and information collection. Although there have been studies on these activities, but not at any analyzing the influencing factors of front end performance and NPD performance. The present study focused on the two points as followed. We will focus on the learning strategy, stakeholder participation and information gathering effect on front end performance. Whether uncertain have a moderating role on the relationships between the front end and front end performance play.

This study will study influence of the front-end activities on front-end performance and exploring the moderating effect of front-end uncertainty. The front-end activities include learning strategic (Poskela and Martinsuo 2009; Stevens 2014), stakeholders involvement (Schoenherr and Wagner 2016; Menguc et al., 2014; Wangner 2012) and information collection (Hart 1999; Olausson and Berggren 2012; Calabrese 1999; Pentina and Strutton 2007). These activities are all

© 2017 Global Journals Inc. (US)

related to front-end information resources. Uncertainty is the greatest feature of the fuzzy front end in the new production development (Moenaert et al., 1995; Ozer 2007; Alam 2006; Verworn 2009; Verworn et al., 2008; Zhang and Doll 2001).

c) *The impact of fuzzy front end activities on FFE Performance*

i. *Learning strategic and FFE Performance*

The strategic orientation determines the learning activities of search scope, standard and integrated use of knowledge. The limited scope of attention will lead to inertia and cognitive basis will be conducive to the development of diversified exploration activities (Hsieh et al., 2016). Therefore, the strategic orientation of enterprise may be an important factor in determining the choice of learning methods. Companies with different strategic orientations may choose and promote different types of learning activities to achieve innovation. The enterprise's strategic orientation can be reflected in the use of resources, selection of competitive strategy and understanding of how to gain competitive advantage (Bacciotti et al., 2016). Different enterprises orientation will have different strategies, define different business scopes and adopt different resources and competitive strategies. There is a big gap among the knowledge technology and ability of a product innovation and existing technology of the enterprise. In order to realize independent innovation enterprise, we often need to learn new knowledge and skills (Moon and Han, 2016). Therefore, in the process of product innovation, it is often necessary to make a tentative study in unknown field. Exploratory learning helps to enterprises to collect new opportunities, new business development, new technology and the ability of exploring learning plan. Many scholars define new product development as an uncertainty reduction process (Lievens and Moenaert, 2000; Lester and Priore, 2004). Because uncertainty can lead to both positive and negative outcomes, refinements in this initial definition are required for application to project management. Perminova et al. (2008) defined "uncertainty as a context for risks as events having a negative impact on projects outcomes or opportunities". Those events have beneficial impact on project performance because the fuzzy front end involves high levels of uncertainty, the transformation of FFE to formal projects results from the coverage of different sources and overcoming uncertainties. The limited level of resources available during the FFE makes personal networks because they provide informal access to resources and expertise (Stevens 2014). Although rationality is difficult to achieve when uncertainty is exists. Learning strategies can contribute to issue identification and then to the adoption of options with the highest probability of success. Knowledge creation processes such as gathering more information, comparing it with existing knowledge, exchanging intensively with other members of team and creating scenarios can contribute to the optimization of choices for development teams (Matinheikki et al., 2016). Therefore, this study proposes the following hypotheses:

Hypothesis1: Learning strategic has a positive impact on front-end performance.

ii. *Stakeholders involvement and FFE performance*

If uncertainty reflects difference between the amounts of knowledge to perform a task and the amount of knowledge available in company (Galbraith, 1973) then development managers can overcome this gap by increasing available knowledge such as: empirical experience, recruitment of new expertise or processing of information in different ways. From this perspective, collecting enough information during go/no-gostages until rational decisions can be made will reduce the level of uncertainty (Cooper and Kleinschmidt, 1994; Verworn et al., 2008). For example: research has recommended increased communication between departments, specifically research and development and marketing, or even improvements in company information systems to gather, process, and structure the information (Moenaert et al., 1995; Montoya and Driscoll, 2000).

Reliable information can effectively reduce the uncertainty and risk, continue to collect relevant technical innovation, market development, internal organization and external development and competition and other aspects of the information, pay attention to historical data, experience and intuition, so as to keep the channels for the flow of information in new product development team (Cao et al., 2015; Kim and Wilemon, 2002; Lievens and Moenaert, 2000). The research of Hoegl and Gemuenden (2001) shows that communication, cooperation, balances of the member contribution, mutual support and cohesion are great significance to team spirit construction. The innovation team of information sharing is helpful to the analysis of function can be increased and reducing variability function, promote new product development team to communicate information can effectively promote NPD project developed new products to meet customer needs (Pei et al., 2013). Under the background of open innovation fuzzy front end collect information not only from technical research and development personnel, marketing personnel, customer service staff and other internal participants, but also learn from suppliers, customers, competitors, universities and research institutions to reduce external participants can play an important role in guiding the practice of front-end uncertainty and improve the performance of NPD effectively. The integration of information flow (Hong et al., 2007).

Hypothesis 2: Stakeholders involved has a positive impact on front-end performance.

© 2017 Global Journals Inc. (US)

iii. *Information collection and FFE Performance*

The ability of an enterprise to collect information determines resources that an enterprise can utilize in the FFE (Olausson and Berggren, 2012; Pentina and Strutton 2007). More information sources, greater the heterogeneity of information, diversity of information on the front-end innovation inspired more. Suppliers and users take participate in front-end activities, which can provide more information about product requirements, product specifications, product performance, part cost in the front end (Schemmann et al., 2016). Other stakeholders take participate in the front end, which can provide more information about market and price. Enterprise integrates information from stakeholders effectively to the front end of innovation, which ultimately may be integrated into RD project (Schoenherr and Wagner 2016; Hong et al. 2011). The empirical study shows that the knowledge sharing of customers, suppliers, competitors and internal subjects has a significant positive impact on the performance of front-end, and that measured by the degree of strategic matching (Hong et al., 2007; Reid et al., 2016). Jeppesen and Laursen (2009) found that will have a positive effect on the development of knowledge sharing leading users; with external related knowledge and full integration of different sources of lead user has a certain regulating effect. Supplier involvement on both sides of interactive relationship between the fuzzy front end (manufacturers and suppliers) has a significant positive impact on technological innovation ability of manufacturing industry. Manufacturing technology learning has a significant positive impact on technological innovation capability. Supplier participation positively influences the breakthrough in the fuzzy front end of innovation. An empirical study shows that supplier involvement in fuzzy front-end can significantly improve customer value (Hong et al., 2007). Li et al. (2013) and other research also shows that supplier involvement in NPD process has a significant positive impact on knowledge creation and innovation ability. The research shows that customer participation in enterprise incremental innovation is conducive to improve NPD performance, and suppliers to participate in incremental innovation and breakthrough innovation can improve NPD performance (Menguc et al., 2013). Customer participation in new products development can enable enterprises to shorten the development time, create competitive advantage and increase sales success.

Hypothesis 3: Information collection has a positive impact on front-end performance.

iv. *The moderating effect of front-end uncertainty*

Front-end uncertainty under environmental such as changing market conditions, emerging technological developments and evolving competition can cause confusion about project targets and how tradeoff decisions should be made(Zhang and Doll, 2001). High-tech industries also face these environment conditions. Front-end uncertainty implies vague and imprecise exogenous causes (i.e. environmental uncertainty) as well as the internal consequences of uncertainty (Zhang & Doll, 2001). The FFE itself is uncertain; a firm's competence and activities must reflect an innovative procedure to succeed in an environment full of uncertainties (Danneels & Kleinschmidt, 2001; Poskela and Martinsuo,2009). Customer's ambiguity, uncertainty technology and competition challenge the organization's ability to function solely on a rational basis. Customer uncertainty defined as lacking an understanding of customers and market leads to product development difficulties and failure based on uncertainty regarding: the demand for the kinds of products offered, appropriate product characteristics, and length of product life cycle. Technology uncertainty is defined as a lack of understanding regarding technology and manufacturing requirements for production based on uncertainty regarding: process functions or input characteristics specifications, suppliers' design, manufacturing capability, and meeting raw material standards. Such uncertainty may lead to launch delay and increased development costs. Competitor uncertainty is defined as a lack of understanding regarding actions undertaken by competitor's product development and technology adoption and so on. This may result in missed launch timing and directly undermine the focal firm's product market (Zhang and Doll, 2001).Contingency theorists have acknowledged that different kinds of uncertainty influence the optimal way of organizing management processes (Donaldson, 2001; Poskela & Martinsuo, 2009; Zhang and Doll, 2001). Previous research indicates that increased technology and market uncertainty reduce the usefulness of process formalization, thereby impacting project efficiency and success (Bstieler, 2005; Calantone et al.,1996; Dwyer & Mellor, 1991; Moenaert et al., 1995; Verworn, 2009;Verworn et al.,2008). In addition, literature indicates the degree of project uncertainty as a moderator in management–performance relationships (Bonner et al., 2002; Langerak et al., 2004; Poskela and Martinsuo, 2009). In high technology competitive environments, higher front-end uncertainty (related to customer, technology and competition),leads to an organization becoming more easily distracted, deviating to unknown strategic goals, being hindered in the process of decision-making and experiencing the prevention of accurate information being available to the project team. Therefore, hypothesize that these management activities impact FFE performance by the front-end uncertainty. When uncertainty is low, Scholars taking information-processing view often suggest that by reducing uncertainty as much as possible during FFE phase, the overall performance can be improved (Alam,

© 2017 Global Journals Inc. (US)

2006; Moenaert et al., 1995; Verworn, 2009; Verworn et al., 2008). For example, Verworn et al. (2008) empirically identified positive relationships between the degree of market and technical uncertainty reduction during FFE and overall project success. Similarly, a survey of 144 innovation projects in Germany by Verworn (2009) highlighted the importance of reducing uncertainty early in FFE phase, because it was found to help improve the communication between participants and limit deviations from specifications later in the process. Alam (2006) conducted a qualitative study of 26 financial service firms and discovered that early involvement of customers helps firms generate more relevant ideas. Improve idea screening and shorten their development cycle time. Moreover, Moenaert et al. (1995) found that, on average innovation uncertainty had been reduced during the FFE in successful innovation projects as much as it had been during whole cycle in unsuccessful ones.

There is a great deal of uncertainty in front-end innovation environment and companies need to deal with a greater risk. When the uncertainty is low, companies can more accurately grasp the market and user needs. The project plan developed by enterprise in the front stage that's more likely to be approved for development and new product commercial success probability will be improved (Verworn 2009; Verworn et al., 2008).

Research has more specifically showed that a high degree of uncertainty can create significant difficulties for front-end projects. Technical uncertainty influences prototype development proficiency and moderate design change frequency. Market uncertainty influences both product launch proficiency and market forecast accuracy, but also moderate prototype development proficiency and design change frequency (Souder et al., 1998）.

If project participants face high levels of such uncertainties (i.e., an inability to close important information gaps) when engaged with front-end activities. The general prediction is that they are likely to face severe consequences and project failures (Herstatt and Verworn, 2004; Murmann, 1994).This prediction is strengthened by previous research, which has shown that successful front-end projects are characterized by low levels of uncertainty (Moenaert, 1995).

Hypothesis 4: uncertainty has moderating effects on the Relationship between learning strategic and front-end performance.

Hypothesis 5: uncertainty has moderating effects on the Relationship between stakeholder's involvement and front-end performance.

Hypothesis 6: uncertainty has moderating effects on the Relationship between information collection and front-end performance.

With the development of technology and business competition, it is more and more difficult for enterprises to develop new products. If the enterprise wants to obtain the success of the new product development, improve the sales volume and market share, we can start from the front-end activities management of the new product development and gain the long-term competitive advantage. The theoretical model of this study is shown in Figure 1 below.

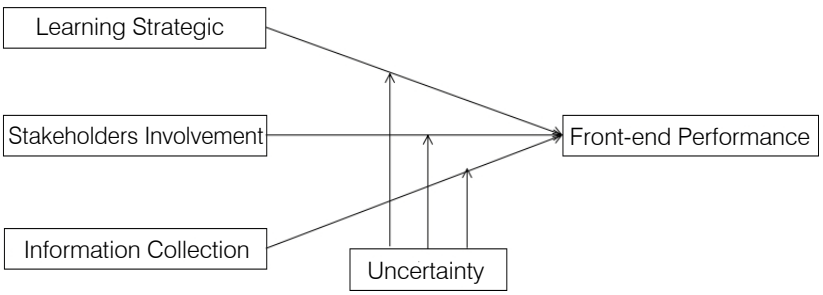


Fig.1: The theoretical model of this study

III. Research Design

a) *An empirical study based on china's manufacturing enterprise*

i. *Questionnaire design and statistical methods*

We collect data by a large sample of questionnaire survey. In order to ensure the content of validity questionnaire survey, in reference to formation on the basis of existing literature. We obtain final questionnaire through the field visits, communicate with enterprise management personnel to listen to expert opinion, scholars conducted several rounds of optimization of the questionnaire. The questionnaire consists of two parts. The first part is the basic information of respondents truthfully filled, including gender, age, education, work experience, job categories, enterprise scale, ownership and firm age. The second part is subjective items on the learning strategic, stakeholders involvement, information collection, uncertainty and front end performance, by the Likert 7 scale (Likert type scale) means the understanding for each problem, "1" means "strongly

© 2017 Global Journals Inc. (US)

disagree", "7" means "very much agreed". The questionnaire analysis method mainly includes the following three kinds:

1) Descriptive statistical analysis: The basic information of the respondents were analyzed, we employee SPSS18.0 to calculate the frequency and percentage the degree of education, work experience, job category, enterprise scale, ownership, firm age and industry etc..
2) Reliability and validity analysis: Cronbach's Alpha coefficient method was employed to measure the correlation between items and to measure the consistency of each variable and scale.
3) Structural equation model analysis: AMOS18.0 software is employed to test goodness of fit and path analysis of conceptual model of this study.

ii. *Data collection and sample descriptive statistics*

The questionnaire is mainly distributed via website and through the screening of qualified students in the MBA/EMBA and senior management training courses in a university. The paper questionnaires were issued and respondents monitored and recovered. On the other hand, we through the field visits, telephone or e-mail and other ways to contact a company with the subjects and as the research in the enterprise contact, and then he will send the questionnaire. This method can ensure the questionnaire recovery rate and quality. This study is to improve the reliability of results, according to the National Bureau of standards for China's manufacturing industry classification. we choose four typical industries with faster product updates and new product development project more, including general equipment manufacturing industry, computer communications and electronic equipment manufacturing, pharmaceutical manufacturing and automobile manufacturing enterprises. In order to improve the quality of questionnaire, the respondents company's senior management, technical director, R&D Manager, senior R&D personnel and marketing personnel, etc. The survey issued a total of 300 questionnaires, the recovery of questionnaire 232, excluding unqualified questionnaire get a valid questionnaire of 196, the effective recovery rate was 65.3%. Table 1 is descriptive statistics of the basic characteristics of respondents. The investigation object of this research is mainly related to staff of the state-owned enterprises and private enterprises in Hubei Province. Foreign enterprises are relatively small in Hubei province, and foreign technology development generally depends on the parent company.

Table 2: Descriptive statistics of the basic characteristics of samples (N=196)

Variable	items	Number	Percentage (%)	Variable	items	Number	Percentage (%)
Education	Junior college and below	46	23.5	Work age	1-3years	95	48.5
	Undergraduate	91	46.4		3-5years	65	33.2
	master	54	27.6		5-10years	31	15.8
	doctor	5	2.5		》10years	5	2.5
Job	R&D	60	30.6	Firm size	《100	58	29.6
	Marketing	44	22.4		101-300	48	24.5
	Management	50	25.5		301-500	27	13.8
	Production	7	3.6		》501	63	32.1
	Logistics	10	5.1	Firm age	1-5years	61	31.1
	Finance	15	7.7		6-10years	67	34.2
	Other	10	5.1		11-25years	38	19.4
industry	General manufacturing	61	31.1		》26years	30	15.3
	Computer, communications and other electronic equipment	52	26.5	ownership	State-owned enterprise	71	36.2
					Private enterprise	65	33.2
	Pharmaceutical	47	24.0		Foreign funded enterprises	36	18.4
	Automotive	36	18.4		Other	24	12.2

iii. *Descriptive statistics of control variables and scales*

The three control variables are firm size, firm age and industry. The firm size represented by the number of employees, including "1" express "and below 100", "2" means "101-300", "3" means "301-500", "4" means "more than 501". Firm age: "1" means "1-5", "2"

© 2017 Global Journals Inc. (US)

means "6-10", "3" means "11-25", "4" means "26 years"; industry of "1" means the general equipment manufacturing industry "," 2 "means" computer, electronic and communication equipment manufacturing industry "," 3 "means" the pharmaceutical industry "," 4 ""automobile manufacturing industry". The descriptive statistics and correlation coefficients of each variable table are shown in table 3.

Table 3: Descriptive statistics and correlation coefficient

Variable name	1	2	3	4	5	6	7	8
learning strategic	1							
stakeholders involvement	0.416**	1						
information collection	0.366**	0.335**	1					
Uncertainty	0.340**	0.336**	0.359**	1				
Front-end performance	0.424**	0.438**	0.421**	0.311**	1			
Firm size	0.492**	0.475**	0.543**	0.401**	0.421**	1		
Firm age	0.412**	0.521**	0.404**	0.411**	0.456**	0.121*	1	
Industry	0.553**	0.512**	0.498**	0.553**	0.478**	0.501**	0.479**	1
Mean value	5.13	5.20	5.19	5.37	5.15	4.91	5.09	5.12
Variance	0.93	0.70	0.86	0.79	0.78	1.21	0.56	0.87

*Note: * * indicates that the path coefficient is significant at the P<0.01 level; * indicates that the path coefficient is significant at the P<0.05 level*

b) Variable measurement

The variables to be measured in this study are learning strategic, stakeholder's involvement, information collection, uncertainty and front-end performance. All scales in reference to recognized literature at home and abroad in the mature scale, according to the characteristics of this study, combined with the actual situation of our country's manufacturing enterprises are modified; this can ensure the reliability and validity of the measurement scale. The learning strategic goals are defined as giving purpose and direction to the work of the team; we created a five-item scale based upon some scholars' conceptualization (Kim & Wilemon, 2002a; Verworn, 2009; Zhang & Doll, 2001; Poskela and Martinsuo 2009; Stevens 2014). Stakeholder's involvement are Including internal personnel, suppliers, customers, competitors and other intermediaries. We created a five-item scale based on some scholars' conceptualization (Choenherr and Wagner 2016; Menguc et al., 2014; Wangner 2012).

Information collections includes of R & D personnel, marketing personnel, other technical personnel to the market, technology resources, other aspects and establish a scientific information collection system as well as information communication work mode. We created a four-item scale based on some scholars' conceptualization (Hart 1999; Olausson and Berggren 2012; Calabrese 1999; Pentina and Strutton 2007). The front-end uncertainty was adapted from three measures and operationalization Zhang and Doll (2001). Customer uncertainty is defined as the lack of determining customer needs in regard to the product. Technology uncertainty is defined as uncertainties regarding manufacturing capability and design technology. Competitor uncertainty is defined as not understanding competitors' technology and product development. We measured front-end uncertainty according to seven items. As discussed earlier, in FFE performance certain aspects, such as scope and profit have yet to be fixed. Our primary concern in measuring this construct was to identify a scale that would enable the assessment of the efficiency and effectiveness of FFE performance according to the NPD performance's conceptualization (Chen et al., 2010; Verworn et al., 2008; Wagner, 2010). This study based on previous research. The front-end activities results would help further research results based on the perspective of 4 evaluation indexes: front end performance has a clear product development goal; the formation of product definition clear; the project team to reach a consensus on the New Product Development; the general development strategy of product development strategy and enterprise consistent. The variables for all variables are shown in Table 4.

© 2017 Global Journals Inc. (US)

Table 4: Variables measurement

Variables	Measures item	References
Learning strategic	LS1:Guiding vision (security) for the exploration of potential applications	Kim & Wilemon, 2002a; Verworn, 2009; Zhang & Doll, 2001; Poskela and Martinsuo 2009; Stevens 2014
	LS2:Creating personal networks and using them in informal exchange of information	
	LS3:Organising convergence between client0s expectations and firms solutions	
	LS4:Seeking to be exposed to problems encountered by clients and divisions	
	LS4:Sourcing expert users of the category of products and associating them in formal or informal networks through common interests	
Stakeholders involvement	SI1: Customers participate in FFE before new product development and provide demand information	Choenherr and Wagner 2016; Menguc et al., 2014; Wangner 2012
	SI2: Suppliers to participate in the new product development cooperation before the design of new products	
	SI3: We understand the advantages and disadvantages of competitors before the new product development	
	SI4: We cooperate with R&D department before new product development	
Information collection	IC1: We set up a new information collection model for new product development	Hart 1999; Olausson and Berggren 2012; Calabrese 1999; Pentina and Strutton 2007
	IC2: We have established a working way of information exchange	
	IC3: We collect information about the market, customers and suppliers in the front-end stage	
	IC4: We collect information about technology, materials and so on	
Uncertainty	U1:We are uncertain of appropriate product characteristics	Verworn et al., 2009; Verworn, 2009;Poskela and Martinsuo 2009;Zhang and Doll ,2001
	U2:We are uncertain of the length of product life cycles	
	U3:We are uncertain of the amount of aggregate product demand	
	U4:We are uncertain of the process functions or input characteristics specification	
	U5:We are uncertain of the suppliers' design and manufacturing capability	
	U6:We are uncertain of competitors' product development	
	U7:We are uncertain of competitors' technology adoption	
Front-end Performance	FP1: We have a clear goal of product development	Chen et al., 2010; Verworn et al., 2008; Wagner, 2010
	FP2: We form a clear product definition	
	FP3: Our project team has reached a consensus on NPD	
	FP4: Our product development strategy is consistent with the overall development strategy of the enterprise	

c) Reliability and Validity test

First of all, we have reliability analysis for learning strategic, stakeholder's involvement, information collection, uncertainty and front-end performance by using the software of SPSS18.0, consistency coefficient (Cronbach α) representative sample reliability. If it is greater than 0.7 that means it carried higher reliability. The results are shown in table 4. Item-general correlation coefficient (CITC) were all greater than 0.35, the coefficients of variables are greater than 0.7, which shows good internal consistency between the measurement items and scale has high reliability. In addition, this study tests the validity of CFA measurement model by AMOS18.0. Standardized coefficient can be seen from table 4, the standardized coefficient is greater than 0.5($P < 0.001$), which shows that the questionnaire has reached the requirements of validity. Through the analysis of reliability and validity is concluded that the measurement index has a strong explanatory power to the corresponding variables, which indicates that the internal quality and construct validity of the better model.

© 2017 Global Journals Inc. (US)

Table 5: Standardized coefficient of each item (N=196)

Variable name	Code	CITC	Delete the item α	Cronbach α	Standardized coefficient
Learning strategic	LS1	0.668	0.703	0.713	0.735
	LS2	0.702	0.713		0.718
	LS3	0.713	0.721		0.778
	LS4	0.732	0.715		0.786
	LS5	0.695	0.703		0.723
Stakeholders involvement	SI1	0.768	0.813	0.762	0.819
	SI2	0.757	0.762		0.784
	SI3	0.721	0.732		0.738
	SI4	0.686	0.738		0.745
Information collection	IC1	0.741	0.762	0.815	0.814
	IC2	0.712	0.745		0.827
	IC3	0.784	0.784		0.830
	IC4	0.720	0.713		0.789
Uncertainty	UN1	0.678	0.783	0.856	0.818
	UN2	0.735	0.803		0.814
	UN3	0.758	0.802		0.797
	UN4	0.731	0.746		0.752
	UN5	0.698	0.722		0.743
	UN6	0.783	0.788		0.794
	UN7	0.754	0.768		0.783
Front-end performance	FP1	0.731	0.773	0.805	0.801
	FP2	0.742	0.769		0.711
	FP3	0.721	0.782		0.813
	FP4	0.698	0.721		0.789

d) Model fitting and path analysis

As can be seen from table 5, the model has good reliability and validity and the structural equation model is established by AMOS18.0. The effective samples of this study reached 196 copies, under the sample capacity. Measured values of skewness and kurtosis are far lower than the critical standard at a reasonable range, the sample data of each item obey normal distribution, and it can be used for maximum likelihood parameter estimation method. The fitting index of the model, as shown in table 6, has reached the requirements of the Structural Equation Model.

Table 6: Results of model fitting (N=196)

	χ^2	χ^2/df	RMSEA	NFI	GFI	CFI
Result value	360.0	1.706	0.059	0.931	0.915	0.929
Reference range	>0	<3	<0.06	>0.9	>0.9	>0.9

We can see that the hypothesis of H1, H2 and H3 are established from the results of path analysis in table 5.

Table 7: Results of path analysis (N=196)

Path	Standardized path coefficients	Path coefficient	C. R.	Results
H1: Learning strategic→Front-end performance	0.294**	0.345	7.109	accept
H2: Stakeholders involvement→Front-end performance	0.420***	0.570	6.308	accept
H3: Information collection→Front-end performance	0.454**	0.510	4.274	accept

*Note: ** indicates that the path coefficient is significant at the P<0.01, * indicates that the path coefficient is significant at the P<0.05.*

© 2017 Global Journals Inc. (US)

e) Hierarchical regression analysis

This study used hierarchical regression analysis to test the moderating effect of uncertainty. Due to this need of regulation effect, the hierarchical regression analysis is employed on the basis of relevant variables and the results are shown in table 8. First of all, the author examines the effect of control variables on performance and the model 1 only include the control variables such as firm size, firm age, industry and so on. As shown in model 1, the regression coefficient of firm age and industry is not significant. The effect of two control variables on the front-end performance of new product development is not significant. The regression coefficient of firm size is 0.117, significant at the level of $P<0.100$, indicating firm size has a positively relationship with the front-end performance, which shows that better enterprise front-end performance is the larger firm size. However, the Adjusted R2 of model 1 and F value is not significant indicating that the interpretation model 1 is very weak. Therefore, effect of control variables on the front-end effect is not obvious. Secondly, the author add independent variables on the basis of model 1 to test independent variables on the dependent variable in model 2-3, and add variable (uncertainty) in model 3 on the basis of model 2. As shown in model 2 and 3, the regression coefficient of learning strategic, stakeholders involvement, information collection and uncertainty at least level of $P<0.050$ significantly and the Adjusted R2 of model 2 and model 3 reached 0.347 and 0.398 respectively, F-test was on the $P<0.001$, the independent variable cab strong explanatory front end performance. Adjusted R2 in model 3 is larger than in model 2, which shows that model 3 can better explain the front end performance and also shows that uncertainty plays an important role in explaining the front end performance. Finally, the author examines the moderating effect of uncertainty on the relationship between independent variables and the front-end performance. Learning strategic, stakeholder's involvement, information collection and the interaction of uncertainty are added to the model 4-6 in turn. As shown in model 4-6 the interaction coefficient is significantly negative. The uncertainty has a negative moderating effect on the relationship between the front-end activities and the front-end performance.

Table 8: Sample hierarchical regression analysis results (N=196)

	Model	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Firm size	0.117*	0.072	0.062	0.056	0.061	0.047	0.049
Firm age	0.008	0.028	0.017	0.013*	0.032	0.021	0.023
industry	0.011	0.020	0.015	0.013	0.007	0.011	0.012
LS		0.221**	0.219**	0.312***			0.218**
SI		0.432***	0.398**		0.412**		0.382**
IC		0.312***	0.289***			0.299**	0.289**
UN			0.387**	0.341**	0.304***	0.334***	0.293***
LS×UN				-0.287**			0.198**
SI×UN					-0.102**		0.107**
IC×UN						-0.148***	0.112**
R^2	0.023	0.356	0.472	0.378	0.344	0.296	0.228
Adjusted R^2	0.009	0.347	0.398	0.341	0.101	0.269	0.415
F-value	2.011	28.342**	30.231***	27.961***	27.232**	26.881**	22.341***

IV. Conclusion and Discussion

This study confirmed the learning strategic effects, stakeholder's involvement, and information collection on the front-end performance, particularly concerning manufacturing industries. Due to its complexity, in the early stage of product development an organization can quickly develop team vision and shared purpose. Also can define clear, realistic project targets and lead the project team in the right direction, to enhance the front-end performance.

a) Research conclusions

First, learning strategic has a positive impact on front-end performance. Enterprises build organizational learning system through the establishment of a detailed learning strategy to learning methods are scientific, learning objectives with strategic and forward-looking. Learning strategy provides a clear strategic direction for the new products development so that the front-end activities are more targeted.

Second, Stakeholders involvement has a positive impact on front-end performance. This shows that the front-end activities through different

© 2017 Global Journals Inc. (US)

mechanisms to promote the front-end performance. Internal staff take contribute in the front-end activities as soon as possible to share their information and knowledge as well as integrated into the front-end project planning book. The enterprise can strengthen the trust between customers to enhance customer dependence through the relationship between investments and improve the enthusiasm of customers involved in the front-end activities. Realizing customer knowledge sharing customer demand will be unified into the NPD initial project planning. The possibility of new product development is greatly improved. Suppliers involved in the front-end process and interaction with manufacturing enterprises that not only can realize the sharing of resources and knowledge. At the same time, supplier can provide a large number of possible market information in interaction process and ideas evoked for product innovation and promote enterprises to progress the front end performance.

Third, Information collection has a positive influence on front-end performance. The more market information collected by R&D personnel in the front-end stage that stronger the pertinence of the customer's needs. Effective technical information can predict technical difficulties that may exist in later stage and reduce the risk of subsequent research and development.

Fourth, the front-end uncertainty has moderating impact relationship between learning strategic and FFE performance, as well as between learning strategic and FFE performance. Particularly regard in to technology uncertainty and competitor uncertainty. Customer uncertainty of front-end has moderating impact learning strategic to FFE performance.

Fifth, the uncertainty has a negative moderating effect on relationship between Stakeholders involvement and front-end performance. This shows that the front-end uncertainty is comparatively high although the suppliers, consumers, competitors and intermediaries involves in the front stage. But it is limited in depth and width without covering all aspects of information. When the front-end uncertainty is low, suppliers, consumers, competitors and R&D team internal communicate to produce more creative for forming project planning, which can be developed to provide more effective creative. Sixth, the uncertainty has a negative moderating effect on the relationship between information collection and front-end performance. When the uncertainty is relatively high, research team needs to collect more information thereby increasing the difficulty of information collection and reducing the role of information collection. While front-end uncertainty is relatively low and the research team to grasp the information sufficient to accurately grasp the market demand to meet the technical needs of new product development. New Product Development project will also reduce the difficulty.

V. Acknowledgment

We would like to thank anonymous reviewers for their very helpful comments and useful suggestions. We would like to express our appreciation to all the firms, respondents, and interviewees who gave their precious time to participate in this study. Our study was funded by National Natural Science Foundation of China (NSFC, project grant No: 71172092), the Grant-in-Aid for Humanities & Social Science research foundation (project grant No: 15JAZH003) from the Ministry of Education (MOE) of China, and also the S&T innovative project from Wuhan Textile University.

References Références Referencias

1. Alam I. Removing the fuzziness from the fuzzy front-end of service innovations through customer interactions [J]. Industrial Marketing Management, 2006, 35(5): 468-480.
2. Bacciotti, D., Borgianni, Y., Cascini, G., Rotini, F.. Product Planning techniques: investigating the differences between research trajectories and industry expectations, 2016, 27(4): 1-23.
3. Brun E, Saetre A S, Gjelsvik M.. Classification of ambiguity in new product development projects [J]. European Journal of Innovation Management, 2009, 12(1): 62-85.
4. Bstieler, L.. The moderating effect of environmental uncertainty on new product development and time efficiency. Journal of Product Innovation Management, 2005, 22(3): 267-284
5. Calabrese G.. Managing information in product development, Logistics Information Management, 1999, 12(6): 439-450.
6. Calabrese G.. Managing information in product development, Logistics Information Management, 1999, 12(6): 439-450.
7. Calantone, R. J., Schmidt, J. B., & Song, M. X. Controllable factors of new product success: A cross-national comparison [J]. Marketing Science, 1996, 15(4), 341-358.
8. CAO Yong, SUN He-lin, JIANG Zhne-yu, Ruan Xi. 2015. Uncertainty management model of the fuzzy front end in new product development. Forum on Science and Technology in China, 26(3), 55-59.(in Chinese)
9. CAO Yong, SUN He-lin, JIANG Zhne-yu, Ruan Xi. 2016a. A study of fuzzy front end uncertainty, knowledge sharing and new product development performance. Science Research Management, 37(05),24-32.(in Chinese).
10. Chen, J., Gao, J.. The influence of Fuzzy Front End on innovation performance of complex product

© 2017 Global Journals Inc. (US)

systems. Journal of Management, 2005, 2(3): 281-290.(in Chinese)
11. Cooper R G.. Predevelopment activities determine new product success [J]. Industrial Marketing Management, 1988, 17(3): 237-247.
12. Cooper R. G., Kleinschmidt E. J. Determinants of timeliness in product development [J]. Journal of Product Innovation Management, 1994, 11(5): 381-396.
13. Danneels, E., & Kleinschmidt, E.. Product innovativeness from the firm's perspective: Its dimensions and their relation with project selection and performance [J]. Journal of Product Innovation Management, 2001, 18(6): 357-373.
14. Donaldson, L. (2001). The contingency theory of organizations. Thousand Oaks, CA: Sage Publications, Inc.
15. Dwyer L. & Mellor, R. Organizational environment, new product process activities, and project outcomes [J]. Jornal of Product Innovation Management, 1991, 8(1): 39-48.
16. Galbraith, J.. Designing Complex Organizations [M]. Addison-Wesley, Reading, 1973.
17. Hart S., Tzokas N., Saren M.. The effectiveness of market information in enhancing new product success rates [J]. European Journal of Innovation Management, 1999, 2(1); 20-35.
18. Herstatt, C., Verworn, B., & Nagahira, A.. Reducing project related uncertainty in the “fuzzy front end” of innovation: a comparison of German and Japanese product innovation projects [J]. International Journal of Product Development, 2004, (1): 43-65.
19. Hsieh, M. Y., Hsu. Y. C., Lin, C. T.. Risk assessment in new software development projects at the front end: a fuzzy logic approach [J]. Journal of Ambient Intelligence & Humanized Computing, 2016, forcoming.
20. Khurana A., & Rosenthal S R.. Integrating the fuzzy front end of new product development. Sloan Management Review, 1997, 38(2): 103-120.
21. Kim J., Wilemon D.. Focusing the fuzzy front end in new product development [J]. R&D Management, 2002, 32(4): 269-279.
22. Koen P., Ajamian G. & Burkart R.. Providing clarity and a common language to the “fuzzy front end” [J]. Research Technology Management, 2001, 44 (2): 46–55.
23. Langerak F, Jan Hultink E, Robben H S J. The role of predevelopment activities in the relationship between market orientation and performance [J]. R&D Management, 2004, 34(3): 295-309.
24. Lievens A, Moenaert R K.. New service teams as information-processing systems: Reducing innovative uncertainty [J]. Journal of Service Research, 2000, 3(1):46-65.
25. Lynn G. S., Akgun A. E. Innovation strategies under uncertainty: a contingency approach for new product development [J]. Engineering Management Journal, 1998, (10):11-17.
26. Markham S. K. The impact of front end innovation activities on product performance [J]. Journal of Product Innovation Management, 2013, 30(S1): 77-92.
27. Matinheikki, J., Artto, K., Peltokirpi, A., Rajala, R.. Managing inter-organizational networks for value creation in the front-end of projects [J].International Journal of Project Management, 2016, 34(7): 1226-1241.
28. Menguc B., Auh S., & Yannopoulos P. Customer and supplier involvement in design: the moderating role of incremental and radical innovation capability [J]. Journal of Product Innovation Management, 2014, 31(2): 313-328.
29. Moenaert R. K., De Meyer A., Souder W. E., & Dsechoolmeester D. R&D/Marketing communication during the fuzzy front end [J]. IEEE Transactions on Engineering Management, 1995, 42(3): 243-258.
30. Moon, H., Han, S. H.. A creative idea generation methodology by future envisioning from the user experience perspective [J]. International Journal of Industrial Ergonomics, 2016, 56: 84-96
31. Murmann, P. A.. Expected development time reductions in the German mechanical engineering industry [J]. Journal of Product Innovation Management, 1994, 11(3): 236-252.
32. O’Connor G. C., Rice P. M. A comprehensive model of uncertainty associated with radical innovation [J]. Journal Development & Management Association, 2013, 30(S1): 2-18.
33. Olausson D., Berggren C., Managing asymmetries in information flows and interaction between R&D, manufacturing, and service in complex product development. R&D Management, 2012, 42(4), 342-357.
34. Ozer M. Reducing the demand uncertainties at the fuzzy-front-end of developing new online services [J]. Research Policy, 2007, 36(9): 1372–1387.
35. Pei, X., Li, S., Huang, Y. The Impact of Supplier Involvement in Fuzzy Front End on Technological Innovation Capability of Manufacturing Enterprises [J]. Systems Engineering, 2013, 31(12):74-80.(in Chinese)
36. Pentina I., Strutton D.. Information processing and new product success: a meta-analysis. 2007, 10(2):149-175.
37. Poskela J, Martinsuo M.. Management control and strategic renewal in the front end of innovation[J]. Journal of Innovation Management, 2009, 26(6):671-684.
38. Reid S E, de Brentani U.. The fuzzy front end of new product development for discontinuous innovations:

© 2017 Global Journals Inc. (US)

A theoretical model [J]. Journal of Product Innovation Management, 2004, 21(3): 170-184.
39. Reid, M., Hultink, E. J., Marion, T., Barczak, G.. The impact of the frequency of usage of IT artifacts on predevelopment performance in the NPD process [J]. 2016, 53(4): 422-434.
40. Run-hua T, Li-hui M, Jian-guang S. Systematic method to generate new ideas in fuzzy front end using TRIZ [J]. Chinese Journal of Mechanical Engineering, 2008, 21(2): 114-119.
41. Schemmann, B., Herrmann, A. M., Chappin, MMH., Heimeriks G. J..Crowdsourcing ideas: Involving ordinary users in the ideation phase of new product development [J]. Research Policy, 2016, 45(6): 1145-1154.
42. Schoenherr, T., Wagner, S. M. Supplier involvement in the fuzzy front end of new product development: an investigation of homophily, benevolence and market turbulence. Int. J. Production Economics, 2016, 180, 101-113.
43. Souder W. E., Moenaert R. K. Integrating marketing and R&D project personnel within innovation projects: an information uncertainty model[J]. Journal of Management Studies, 1992, 29(4): 485-512.
44. Souder, W. E., Sherman, J. D., Davies-Cooper, R..Environmental uncertainty, organizational integration, and new product effectiveness: A test of contingency theory [J]. Journal of Product Innovation Management, 1998, 15(6), 520-533.
45. Stevens E., Fuzzy front-end learning strategies: exploration of a high-tech company. Technovation 2014, 34, 431-440.
46. Sun, H. Study on the Impact Knowledge Sharing and Fuzzy Front End Management on New Product Development Performance [D]. Wuhan: Wuhan Textile University, 2016.
47. Verworn B., Herstatt C., & Nagahira A. The fuzzy front end of Japanese new product development projects: impact on success and differences between incremental and radical projects [J]. R&D Management, 2008, 38(1): 1-19.
48. Wangner S M. Tapping supplier innovation [J]. Journal of Supply Chain Management, 2012, 48(2): 37-52.
49. Yu, F.. Study on the Influence of Front-end Creative Management on Innovation Performance of New Product Development [D]. Hangzhou: Zhejiang University, 2005.(in Chinese).
50. Zhang Q, Doll, W. J. The fuzzy front end and success of new product development: A causal model [J]. European Journal of Innovation Management, 2001, 4(2): 95-112.

© 2017 Global Journals Inc. (US)

This page is intentionally left blank

© 2017 Global Journals Inc. (US)

Global Journal of Management and Business Research: B
Economics and Commerce
Volume 17 Issue 2 Version 1.0 Year 2017
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Impact Du Commerce Exterieur Sur L'efficacite De L'aide Publique Au Developpement: Cas Du Cameroun

By Dazoue Dongue Guy Paulin

FSEG de l'Université de Maroua

Abstract- L'Afrique sub-saharienne en est la principale région bénéficiaire de l'APD. Elle est également la région où la pauvreté augmente le plus. La raison le souvent évoquée pour expliquer l'inefficacité de l'aide au développement est la mauvaise gouvernance des pays bénéficiaires. Pourtant, il parait que l'inefficacité de l'APD est due à une incohérence des politique d'aide publique au développement et les autres politiques des pays du Nord à l'égard des Pays du Sud. Pour élucider ce paradoxe, une étude empirique est menée sur impact du commerce extérieur sur l'efficacité de l'aide publique au développement. A partir des données de WDI(2016) pour la période 1985 à 2014, l'estimation du modèle économétrique par la Méthode des Moments Généralisés(MMG) révèle que l'ouverture commerciale impacte négativement et de façon significative l'efficacité de l'APD du Cameroun. Plus le pays est ouvert aux échanges commerciaux internationaux moins son APD est efficace.si le Cameroun cesse d'échange avec l'extérieur, une augmentation de 1% de son volume d'APD entrainerait une augmentation de la croissance économique de 2, 36%.

Keywords: *aide publique au développement, commerce nord-sud, efficacité de l'apd, cohérence des politiques pour le développement(CPD).*

GJMBR-B Classification: *JEL Code: P35*



Strictly as per the compliance and regulations of:

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

Impact Du Commerce Exterieur Sur L'efficacite De L'aide Publique Au Developpement: Cas Du Cameroun

Dazoue Dongue Guy Paulin

Resume- L'Afrique sub-saharienne en est la principale région bénéficiaire de l'APD. Elle est également la région où la pauvreté augmente le plus. La raison le souvent évoquée pour expliquer l'inefficacité de l'aide au développement est la mauvaise gouvernance des pays bénéficiaires. Pourtant, il parait que l'inefficacité de l'APD est due à une incohérence des politique d'aide publique au développement et les autres politiques des pays du Nord à l'égard des Pays du Sud. Pour élucider ce paradoxe, une étude empirique est menée sur impact du commerce extérieur sur l'efficacité de l'aide publique au développement. A partir des données de WDI(2016) pour la période 1985 à 2014, l'estimation du modèle économétrique par la Méthode des Moments Généralisés(MMG) révèle que l'ouverture commerciale impacte négativement et de façon significative l'efficacité de l'APD du Cameroun. Plus le pays est ouvert aux échanges commerciaux internationaux moins son APD est efficace.si le Cameroun cesse d'échange avec l'extérieur, une augmentation de 1% de son volume d'APD entrainerait une augmentation de la croissance économique de 2, 36%. Avec un taux de 13,03% d'ouverture commerciale, l'efficacité de l'APD est nulle, au dessus de cette valeur l'APD devient inefficace. Le Cameroun ayant une balance commerciale structurellement déficitaire, nos conclusions plaident pour la cohérence de la politique d'aide publique au développement et la politique commerciale des pays du Nord à l'égard du Cameroun.

Motsclés: aide publique au développement, commerce nord-sud, efficacité de l'apd, cohérence des politiques pour le développement(cpd).

I. Contexte De L'étude

Avec la fin de la Guerre Froide, l'aide au développement a perdu les soutiens et les justifications qu'elle y trouvait. La fidélisation des pays du Tiers Monde ne sont plus perçues comme un enjeu essentiel par les décideurs politiques pour l'octroi de l'aide. En outre, l'augmentation de la pauvreté, parallèlement à la politique d'aide au développement ainsi que les problèmes liés à l'endettement des pays aidés vont dans les années 1990, conduire l'aide dans une crise de légitimité sans précédent avec diminution du volume d'aide octroyée aux pays en développement au cours de ces années. Cet affaiblissement a rendu plus audibles les critiques de toutes sortes sur l'aide publique au développement:

Author: Enseignant–chercheur à la Faculté des Sciences Economiques et de Gestion de l'Université de Maroua-Cameroun BP: 46 Maroua - Cameroun. e-mail: dazoue_guy@yahoo.fr

- Critique libérale, qui accuse l'aide de distordre les marchés, de déresponsabiliser les gouvernements et d'emprisonner les États bénéficiaires dans la dépendance à l'égard des subsides internationaux ;
- Critique marxiste, pour laquelle l'aide publique au développement s'est faite le vecteur de la globalisation et de la libéralisation économique des pays en développement au détriment de ces derniers;
- Critique managériale, qui relève l'inefficacité de l'aide publique au développement en comparant les volumes engloutis au cours des décennies avec les résultats obtenus; particulièrement en Afrique subsaharienne.

Dans cette conjoncture défavorable à l'aide internationale, la Banque Mondiale a relancé le débat sur l'efficacité de l'aide publique au développement avec la publication de son rapport « Assessing Aid » (1998) fondé sur les travaux de Burnside et Dollar (1997). Ce rapport soutient que l'efficacité de l'aide en matière de croissance dépend de la qualité des politiques économiques des pays en développement. L'aide au développement devrait rendre dynamique l'activité économique dans les pays récipiendaires, entraîner des progrès sociaux, soulager la souffrance des populations pauvres, soutenir le développement de façon durable.

Que ce soit la Banque mondiale, le FMI ou encore certaines agences de développement des pays du Nord, tous suivent le concept selon lequel l'aide publique au développement ne peut être efficace dans la réduction de la pauvreté que si le pays a des politiques économiques saines. Sises politiques sont mauvaises, alors ils ne recevront plus ou très peu d'aide Publique au développement malgré le besoin des populations. En effet, l'efficacité conditionnelle apporte la justification quant au choix des pays à aider et les montants à octroyer. Ce modèle plaît aux pays industrialisés et aux organismes de l'aide multilatérale qui ne se gênent pas pour sélectionner les pays en fonction de la qualité de leurs politiques économiques dans le but de réduire le plus possible la pauvreté. Et pourtant dans le business de l'aide publique au développement, la plupart des pays industrialisés du Nord paraissent s'être placés eux-mêmes dans une impasse quant à leur crédibilité auprès des

© 2017 Global Journals Inc. (US)

observateurs de l'économie du développement et des populations des pays en développement. Celle-ci, et c'est bien connu aujourd'hui, se trouve au plus bas dans la plupart des pays occidentaux. La cause première de cette perte de confiance se trouve dans les politiques incohérentes, presque anarchiques, des pays du nord. En effet certaines politiques publiques des pays du Nord effacent parfois l'impact positif de l'aide publique au développement. « A quoi sert-il par exemple d'aider les pays pauvres à améliorer leurs capacités d'exportation si, dans le même temps, les nations développées maintiennent leurs barrières commerciales » (Charnoz et Severino, 2007) ?

On s'inquiète par exemple du fait que les politiques commerciales ou migratoires des pays du Nord fassent supporter un coût très important aux pays qui reçoivent le plus d'aide publique au développement; réduisant à la fois la lisibilité et l'efficacité de l'aide internationale. Quand on examine la situation pays par pays, certains cas semblent effectivement porter la marque de sérieuses incohérences. Celles-ci concernent au premier chef l'articulation entre politiques d'aide publique au développement et les politiques commerciales. En effet, certains pays largement bénéficiaires de l'aide publique au développement doivent faire face à des protections commerciales particulièrement importantes. D'un côté, les pays africains à faible revenu producteurs de coton par exemple sont confrontés à des cours internationaux déprimés et aux distorsions provoquées par les subventions accordées aux producteurs des pays développés ; de l'autre coté, les mêmes pays africains reçoivent une aide internationale pour réformer et doper leurs capacités de production de coton. L'Union Europeénne est favorable à une aide budgétaire aux pays concernés pour financer un fonds de stabilisation afin de préserver les filières de production plutôt que de chercher une régulation du marché international qui réduise les distorsions. Bien que le droit de douane moyen appliqué par les pays du Nord aux produits du Sud ait diminué depuis les années 1980, des pics tarifaires et des barèmes progressifs perdurent. Ils frappent surtout des secteurs pour lesquels les pays en développement détiennent des avantages comparatifs à savoir les produits agricoles. Les barrières non tarifaires sont également un moyen de mettre des entraves au commerce. Cela va de l'instauration de normes aux difficultés administratives en passant par des standards. Bien que l'on puisse penser qu'il soit cohérent de compenser les pays auxquels on ferme ses portes, il semble clair qu'une telle combinaison de politiques revient à interdire aux pays pauvres les moyens de s'affranchir de leur dépendance vis-à-vis de l'aide internationale. Selon une étude empirique de Cogneau et Lambert (2006), des pays pauvres comme le Nicaragua ou le Honduras spécialisés dans les exportations de sucre bénéficient d'une aide par tête importante mais sont taxés de façon exceptionnellement élevée (entre 4.5 et 6.9 points de plus que ce qu'ils devraient supporter s'ils étaient confrontés aux droits de douane moyen de leurs concurrents). Le cas du Malawi est un autre exemple concret : ce pays touche une aide internationale représentant 4.9 pour cent de son PIB mais est confronté à un taux de taxation sur ses exportations supérieur de 9 points à la moyenne de se Il est au premier chef essentiel qu'ils s'engagent dans une libéralisation accélérée de leurs marchés dans les domaines où les PED ont encore un avantage comparatif (textiles et agriculture notamment). le rapport Oxfam en 2002 note que les barrières mises en œuvre par les pays riches à l'encontre des exportations des pays pauvres coûte à ces derniers 100 milliards de dollars par an, c'est-à-dire deux fois plus qu'ils ne reçoivent au titre de l'APD.

Par ailleurs, suite à l'unification accélérée des marchés et des règles de concurrence depuis les années 1980, le nombre de normes imposées à tous les acteurs économiques a explosé. Ces normes concernent entre autre le sanitaire, l'environnemental, le social, l'éthique. L'équilibre entre la nécessité de diffuser certaines règles et la revendication des pays pauvres à se développer dans des conditions environnementales et sociales comparables à celles des pays riches au moment de leur décollage économique est difficile à trouver. C'est ainsi qu'en 2013 plusieurs tonnes de cacao camerounais a été refoulées sur le marché de l'Union européens pour non respect des normes.

Les pays du Nord protègent surtout les produits pour lesquels les pays du Sud ont des avantages comparatifs (riz, coton, sucre, etc.). Pour illustrer ce problème, plusieurs petits exemples sont présentés. Le premier est le cas des poulets congelés. Ces poulets de deuxième choix provenant d'Europe sont subventionnés et par conséquent peuvent être écoulés à prix cassé sur les marchés africains. Les ménagères ne demandent pas mieux pour nourrir leur grande famille. Mais les éleveurs locaux n'arrivent pas à écouler leurs marchandises et finissent par abandonner la partie. Une opinion au Cameroun soutient que la recrudescence de la grippe aviaire au Cameroun serait une manière de justifier plus tard la réouverture de la frontière camerounaise à ces poulets suite aux chantages des pays du Nord.

On est passé, en quelques décennies, d'une vision un peu caricaturale de l'aide au développement comme simple source de financement externe, à la vision néoclassique du mot d'ordre « trade, not aid » (le développement par le commerce plutôt que par l'aide), puis à une prescription plus sophistiquée, défendue par la Banque mondiale de « l'aide pour le commerce » (« aid for trade »). Cependant, c'est d'aide et de commerce dont ont besoin les pays pauvres, d'où la nécessité de la cohérence entre la politique d'aide

© 2017 Global Journals Inc. (US)

publique au développement et la politique commerciale des pays riches en faveur des pays pauvres.

La signature de l'Accord de Partenariat Economique (APE) entre le Cameroun et l'Union Européenne aura des impacts forts sur l'économie camerounaise. Une étude du MINEPAT en 2013, montre des pertes cumulées de recettes non pétrolières de 547,7 milliards sur la période 2010-2020, dont 459,6 milliards entre 2015 et 2020. Ce gap représenterait en moyenne 0,4% du PIB sur cette dernière période, et cette situation aggraverait le besoin de financement de l'économie qui passerait de 216,3 milliards en 2010, à 1 167,5 milliards en 2020 ». Le MINFI quant à lui, évalue les pertes en termes de recettes fiscales à 1 330 milliards de perte cumulée en 2023 et 2470 milliards en 2030.

Le plan d'adaptation de l'économie camerounaise étant évalué à 2500 milliards, en perspective à ces accords pour le renforcement du tissu économique à travers l'amélioration de la compétitivité des entreprises camerounaises. En l'absence des recettes générées par les droits de douanes, les pouvoirs publics sont dans la recherche de la solution la plus optimale, c'est-à-dire celle qui permettra à l'Etat au mieux de maintenir le même niveau de recettes et de poursuivre son plan d'investissement qui à terme, ferra du Cameroun un pays émergent à l'Horizon 2035. Cette solution ne peut que résider soit dans l'élargissement de l'assiette fiscale, soit dans l'agrandissement de la base fiscale. Toute chose restant égale par ailleurs.

La solution qui induira moins d'effets pervers est celle de l'élargissement de l'assiette fiscale. Le secteur informel représente près de 80% de l'économie nationale. Si l'on veut élargir l'assiette fiscale, il faudra à court et à moyen terme, faciliter la migration des 3 635 Unités de Production Informelles recensées lors de la deuxième Enquête sur l'Emploi et le Secteur Informel (EESI2 de 2010), vers le secteur formel. Mais la faible productivité et la faible compétitivité des entreprises camerounaises (115e pays sur 148 au classement 2013 du World Economic Forum) ne peuvent pas leur permettre en l'état actuel de faire concurrence avec les économies développées. Conséquence, si rien n'est fait dans le sens de renforcer cette compétitivité, l'économie nationale sera paralysée et la croissance plombée du fait de l'incapacité des entreprises nationales à créer plus de richesses et plus d'emplois. L'émergence de la chine par exemple s'est traduit par l'augmentation des exportations de la Chine vers les pays africaines et parallèlement par une augmentation de l'aide publique au développement de la Chine vers l'Afrique. Ceci semble synchroniser avec les propos du Robert McNamara, alors président de la Banque mondiale, dans son discours prononcé, le 30 septembre 1968: « La part des fonds apportés par l'aide (APD) qui reste dans les pays en développement est très faible. Pratiquement, tout l'argent octroyé retourne rapidement aux pays riches sous forme de produits achetés chez eux. » . L'objectif général de ce travail est d'étudier la cohérence pour le développement économique entre l'aide publique au développement et les échanges commerciaux des pays développés à l'égard du Cameroun. Ceci se fera en appréciant l'impact du commerce extérieur sur l'efficacité de l'aide publique au développement du Cameroun.

II. Revue De La Littérature

Plusieurs travaux porte sur l'efficacité de l'aide publique au developpement. Severino J-M. et al., (2010), Séverine B., (2004), Rajan R. G. et Subramanian A., (2008). Nafiou M., (2009).les resultats de ses travaux montrent que l'aide publique est: efficace ou inefficace d'une part alors que d'autres travaux parlent d'une efficacité conditionnelle.

Dollar et Easterly (1999) corroborent cette assertion et renchérissent que dans un environnement crédible, l'aide favorise l'investissement privé et que le rapport entre ces deux variables dépend de la qualité de la politique économique.

De même, Burnside et Dollar (2000), Lensink et White (2000) tout comme Collier et Dollar (2002) mettent en exergue l'efficacité de l'APD. Ils font une étude interactive entre l'aide, la politique et la croissance Il ressort de leurs études que l'aide a un effet positif sur la croissance dans un environnement politique sain alors que ce n'est pas le cas dans un environnement politique malade. Selon ces auteurs, l'efficacité de l'aide dépend de la qualité de la politique économique du pays récipiendaire. Il faut d'après eux cibler uniquement les pays pauvres ayant des politiques économiques saines pour maximiser l'efficacité de l'aide. L'étude de Burnside et Dollar (2000) porte sur un échantillon de 56 PED, pour des sous périodes de 4 ans allant de 1970 à 1993. La méthode des moindres carrés à deux étapes est utilisée pour estimer les équations de ces variables simultanément. Elle est représentée à travers les analyses économétriques intégrant trois variables explicatives de politique économique: l'inflation, le surplus budgétaire et la politique d'ouverture. Les résultats obtenus sont présentés ainsi: *POL = 1,28 + 6,85. Surplus budgétaire – 1,40. Inflation + 2,16. Politique d'ouverture commerciale*.

La variable POL est alors introduite dans l'équation ci-après ayant pour variable dépendante « CROISSANCE » :

*CROISSANCE = - 0,60 (Revenu initial par habitant) + 0,71 (POL) – 0,021 (Aide / PIB) + 0,19 (Aide / PIB) *POL + gX* où gX est un ensemble de variable de contrôle.

Ces résultats révèlent que la variable explicative Aide / PIB n'est pas significative, ce qui signifie que l'aide toute seule n'a pas d'impact sur la croissance. Toutefois, si on associe à cette variable explicative une variable politique Aide / PIB * POL, alors, celle-ci devient

© 2017 Global Journals Inc. (US)

très significative et ainsi, elle aura un effet positif sur la croissance.

Lensink et White (2000) ainsi que Collier et Dollar (2002)utilisent les mêmes indicateurs de la politique économique que Burnside et Dollar (2000).Néanmoins, Collier et Dollar (2002)soulignent d'une part que l'impact total de l'aide est grand par rapport à celui suggéré par l'analyse de Burnside et Dollar (2000). D'autre part, ils révèlent que la sensibilité de l'aide à la politique est plus variable, c'est-à-dire qu'une variation de l'aide d'un point de pourcentage entraine la variation du taux de croissance de 0,6 point de pourcentage dans des pays avec de bonnes politiques économiques. Ce taux est de 0,4 point pour les pays avec des politiques économiques moyennes et de 0,2 pour les pays avec des politiques économiques faibles stéris paribus.

Burnside et Dollar (2000) illustrent leur résultat à travers le graphique ci-dessous. Le taux de croissance moyen de chaque groupe semble dépendre de l'interaction qui existe entre l'aide et les politiques. Ce graphique démontre que la qualité des politiques a un impact significatif sur la croissance.

Le modèle des précédents auteurs a fait l'objet d'importantes critiques (Saad, 2012). La sélectivité des pays receveurs d'une part et d'autre part l'échantillon de pays assez restreint ont été remis en question. De plus, l'indicateur de politique économique retenu par Burnside et Dollar ne fait pas l'unanimité car l'inflation ne serait pas une mesure de politique économique et que sa relation avec la croissance serait non linéaire. Quant au surplus budgétaire, il ne serait pas un déterminant significatif de la croissance.

Suite à l'analyse de Burnside et Dollar, Dalgaard et al (2001) ont introduit en plus du terme interactif de l'aide avec l'indicateur de politique économique Aide * POLt, un terme interactif de l'aide avec la qualité initiale de ces politiques Aide * POL(t-1). Ils arrivent à la conclusion selon laquelle Aide * POLt est une variable significativement positive tandis que Aide * POL(t-1) est significativement négative.

Devarajan et al (2001) ont étudié la relation entre l'aide et les réformes dans 10 pays africains dont deux pays réformateurs (Ghana et Ouganda) où l'impact de l'aide a joué un rôle plus que positif et significatif. Ils considèrent toutefois que des montants d'aide relativement élevés, orientés vers les pays ayant de mauvaises politiques économiques ont tendance à perdurer ces mauvaises politiques.

Similairement, Denkabe (2003) cherche à déterminer l'impact de l'APD sur la croissance économique vis-à-vis de la politique économique. Comme mesure de cette dernière, il a retenu l'ouverture commerciale, l'inflation et la balance fiscale. Grâce à la méthode des moments généralisés, il suggère qu'il existe un seuil d'APD en dessous duquel l'aide tend à avoir un impact positif sur la croissance mais au dessus duquel son effet est non positif sur la croissance. Ce seuil d'aide est fonction de la politique macroéconomique.

Tous ces résultat sont été contestés dans de nombreux travaux parmi lesquels ceux de Guillaumot et Chauvet (1999). Ces derniers affirment qu'une bonne politique macroéconomique a une influence positive sur la croissance, indépendamment de l'aide ou de l'environnement extérieur. Ils montrent que l'aide reste efficace même si on ne tient pas compte de la qualité de la politique économique.

D'après Lensink et Morrissey (2000), lorsque l'on prend en compte l'incertitude de l'APD, son impact sur la croissance devient significatif. Ils estiment donc une équation d'investissement juste pour montrer que l'impact de l'APD sur la croissance passe par l'investissement, en y ajoutant une variable relative à l'incertitude de l'APD. Pour estimer l'équation d'investissement, ils utilisent les valeurs moyennes de 88 PED, dont 43 pays africains entre 1970 et 1995. Leur résultat établit que l'APD a un impact significatif sur l'investissement seulement lorsque l'incertitude de l'APD est incluse dans l'équation mais reste non significatif lorsque seulement les pays africains sont considérés.

Dans l'une de leurs publications, Guillaumot et Chauvet (2001) montrent que l'aide est plus efficace dans les pays qui sont économiquement vulnérables. De plus ajouter cette nouvelle variable A*E entraine le terme interactif A*P à être négatif, significatif lorsqu'on utilise la méthode OLS (Ordinal Least Square) mais non significatif lorsque ce sont des techniques TSLS (Two Stage Least Square) qui sont utilisées. Les auteurs concluent que l'aide additionnelle doit-être donnée aux pays qui font face aux chocs externes. En outre ils pensent que les facteurs externes ont un impact sur la variable politique de telle sorte que les pays vulnérables aux chocs externes trouvent très pénible de maintenir des politiques saines.

Hansen et Tarp (2001) soutiennent l'idée de Guillaumot et Chauvet (1999). Grâce à la méthode des moments généralisés, ceux-ci stipulent que l'effet marginal de l'aide sur la productivité semble diminuer quand les flux d'aide augmentent. Ils ajoutent qu'il n'y a aucune relation entre l'aide et la politique économique. Tout comme Burnside et Dollar (2000), ces auteurs ont retenu trois variables pour indiquer la politique économique.

Dollar et Levin (2006) examinent dans quelle mesure l'APD bilatérale et multilatérale est sélective en termes de démocratie et de droits y compris les devoirs propres à la loi. Il ressort de leur étude grâce à l'estimation du « tobit » que l'assistance multilatérale est plus sélective que l'aide bilatérale destinée aux pays avec des bonnes règles de loi. D'après eux, l'aide bilatérale et multilatérale avait une relation significative et négative avec les règles loyales au cours de la période 1984-1989. De 2000 à 2003, celle-ci a changé et dès

© 2017 Global Journals Inc. (US)

lors, on observe une relation significative et positive pour l'aide multilatérale et un rapport positif mais statistiquement non significatif pour l'aide bilatéral vis-à-vis des règles loyales.

Dans une étude plus récente, Chauvet et Guillaumont (2007) révèlent que l'APD a un impact stabilisateur, premièrement sur la volatilité des exportations, deuxièmement et plus généralement sur la volatilité du revenu. Lorsque l'APD est pro cyclique, sa volatilité peut baisser voire même supprimer celles des investissements et du revenu. Par contre, lorsque l'APD est contra cyclique, sa volatilité a de la peine à agir sur celles des investissements et du revenu.

III. Methodologie De Recherche

a) Spécification du modèle

Burnside et Dollar (2000) ont émis l'hypothèse selon laquelle l'efficacité de l'aide est conditionnée par la politique économique, d'où l'introduction du terme interactif APD.POL pour vérifier cette hypothèse. Par ailleurs, Dollar et Easterly (1999), Lensking et White (2000), Hansen et Tarp (2001) tout comme Collier et Dollar (2002) pour ne citer que ceux-ci pensent également qu'une bonne politique économique dans un pays donné est une condition sine qua none pour obtenir un effet positif de l'aide sur la croissance économique. En d'autres termes, l'aide est plus efficace dans les pays avec de bonnes politiques économiques. Ils ont alors ajouté la variable interactive APD.POL dans le but de tester cette assertion.

$$Y_t = b_0 + b_1 Y_{t-1} + b_2 INV_t + b_3 OUV_t + b_4 INF_t + b_5 APD_t + b_6 APD^2_t + b_7 APD_t.POL_t + \varepsilon_t$$

Par contre, certains affirment que d'autres conditions en dehors de la politique économique sont primordiales dans la bonne marche de l'APD sur l'économie d'un pays. C'est le cas de Guillaumont et Chauvet (2001) pour qui l'aide est plus efficace dans les pays économiquement vulnérables. Il en est de même pour Dalgaard et al. (2001).

Etant donné que cette étude s'inspire de celle de Burnside et Dollar (2000), la variable POL dans le terme interactif APD.POL est désagrégée. Dans l'équation à estimer dans le but de vérifier si l'efficacité de l'aide est conditionnée par le niveau de l'ouverture commerciale.

L'équation dynamique à estimer est donc réécrite de la façon suivante:

$$Y_t = b_0 + b_1 Y_{t-1} + b_2 INV_t + b_3 OUV_t + b_4 INF_t + b_5 APD_t + b_6 APD^2_t + b_7 APD_t.OUV_t + \varepsilon_t$$

Le taux de croissance du PIB réel par habitant(Yt) est la variable endogène ou expliquée du modèle, les variables exogènes ou explicatives sont les suivantes: APDt, OUVt, INFt, INVt, APDt2, APDtxOUVt et Y,t-1. Les signes attendus sont récapitulés dans le tableau ci-dessous:

Tableau 1: Signes attendus de l'équation APD-croissance économique

Variables exogènes	Signes Attendus
APD	(+/-)
OUV	(+)
EPA	(+)
INF	(+/-)
INV	(+)
Y_{t-1}	(-)
APD^2	(-)
APDxOUV	(+/-)

Déduction de l'efficacité de l'APD et l'Ouverture commerciale.

Pour simplifier: supposons que la croissance économique est fonction de l'aide et l'ouverture commerciale uniquement.

$$Y_t = a_0 + a_1 OUV_t + a_2 APD_t + \varepsilon_t$$

Nous faisons l'hypothèse effet de l'aide publique au développement (a2) est fonction du niveau d'ouverture commerciale.

Sous forme mathématique, on peut écrire $\boldsymbol{a_2}$ = c + d*OUV

En remplaçant dans l'équation précédente on a :

$$Y_t = a_0 + a_1 OUV_t + (c + d*OUV)\, APD_t + \varepsilon_t$$

$$Y_t = a_0 + a_1 OUV_t + c\, APD_t + d\ OUV\ *APD_t + \varepsilon_t$$

On considérant les coefficients de l'équation dynamique on a:

$$Y_t = b_0 + b_3 OUV_t + b_5 APD_t + b_7 APD_t.OUV_t + \varepsilon_t$$

© 2017 Global Journals Inc. (US)

Par identification $a_1 = b_3$; c= b_5 et d= b_7

Il y a un impact interactif si et seulement si b7 est significatif. Si tel est le cas, le lien entre l'efficacité de l'Aide publique au développement et l'Ouverture commerciale est défini comme suit:

$$\text{Efficacité de l'APD} = b_5 + b_7 * \text{OUV}$$

b) Méthodes d'estimations des paramètres du modèle.

La procédure d'estimation se fera en trois étapes. D'abord, nous vérifions la stationnarité des séries, ensuite nous faisons un test de cointégration pour examiner l'existence d'une relation de long terme et enfin, nous procédons à l'estimation de cette relation.

➢ Test d'Im Pesaran et Shin (1997, 2002 et 2003)

Pour détecter la présence de racine unitaire sur des données de panel, le test de Dickey Fuller Augmenté (DFA) ne peut plus être utilisé car si l'on surestime le nombre de retards, la puissance du test DFA est détériorée. Le problème est fondamental si le nombre de retards est sous évalué. Dans ce cas, la para métrisation du modèle ne permet pas de blanchir totalement les résidus, en conséquence de quoi les distributions asymptotiques de DFA ne sont plus valides (Hurlin et Mignon, 2005).

Les premiers tests de racine unitaire sur panels hétérogènes ont été proposés par Im Pesaran et Shin (1997), Manddala et Wu (1999), Breitung (2000) et Levin et Lin Chu (2002). Ces auteurs proposent une statistique de test simple fondée sur la moyenne des statistiques de DFA individuelles. L'une des principales faiblesses des tests de Breitung (2000) et Levin et Lin (2002) réside dans le caractère homogène de la racine autorégressive sous l'hypothèse alternative. Autrement dit, pour ces auteurs, dans un panel de pays donné par exemple, lesdits pays se comportent de façon homogène, ce qui est problématique en réalité.

Sous l'hypothèse alternative H1, les tests d'Im Pesaran et Shin (1997) (IPS) autorisent non seulement une hétérogénéité de la racine autorégressive, mais aussi une hétérogénéité quant à la présence même d'une racine unitaire dans le panel. Les auteurs introduisent un test sous la nomination de t-bar et proposent de tester l'hypothèse nulle $\phi i = 0$ pour toutes valeurs de i contre l'hypothèse alternative $\phi i < 0$ pour i = 1, 2,….., N1 et $\phi i = 0$ pour i = N1+1, N2+2,……., N. Im Pesaran et Shin (2003) ont démontré par simulation de Monte Carlo que leur propre test possède un pouvoir explicatif plus fort que les autres tests de racine unitaire en panel. Nous privilégions donc ce test pour toutes ces raisons.

Si les séries ne sont pas stationnaires, c'est-à-dire que s'il y a existence de racine unitaire, on va employer les tests de Pedroni (1999, 2004) pour tester la présence de relation de cointégration entre le commerce (exportation et importation) et les variables exogènes au détriment des tests d'Engle et Granger (1987).

➢ Test de cointégration

Tout comme les tests IPS (2003), les tests de Pedroni (1999, 2004) prennent en compte l'hétérogénéité par le biais de paramètres qui peuvent différer entre les individus. Une telle hétérogénéité peut se situer à la fois au niveau des relations de cointégration et au niveau de la dynamique de court terme. Ainsi, sous l'hypothèse alternative, il existe une relation de cointégration pour chaque individu du panel. La prise en compte d'une telle hétérogénéité constitue un avantage puisqu'en pratique, il est rare que les vecteurs de cointégration soient identiques d'un individu à l'autre du panel (Abida, 2011).

La mise en œuvre des tests de Pedroni nécessite au préalable d'estimer la relation de long terme ci-dessous:

$$y_{it} = \alpha_i + \delta_i t + \beta_{1i} x_{1,it} + \beta_{2i} x_{2,it} + \cdots + \beta_{Mi} x_{M,it} + \varepsilon_{it}$$

Avec i = 1, ……, N désignant l'individu; t = 1, ……., T et m = 1,……..M.

Les sept tests de Pedroni sont fondés sur les dimensions within ou intra-individuelle (4 tests) et between ou inter-individuelle (3 tests). Ils reposent sur l'hypothèse nulle d'absence de cointégration:

$p_i = 1 \forall i, p_i$ est le terme autorégressif des résidus estimés sous l'hypothèse alternative tels qu'on ait:

$$\varepsilon_{it} = p_i \varepsilon_{it-1} + \mu_{it}$$

Le constat qui se dégage est que le test fondé sur la dimension between est plus général au sens où il autorise la présence d'hétérogénéité entre les individus sous l'hypothèse H1.

Les statistiques de Pedroni suivent une loi normale centrée réduite pour T et N suffisamment importants (Abida, 2011):

$$\frac{Z_{NT} - \mu\sqrt{N}}{\sqrt{v}} \rightarrow N(0,1)$$

Où ZNT, désigne une des sept statistiques normalisées, les valeurs de $\boldsymbol{\mu}$ et $\boldsymbol{v}$ sont tabulées dans Pedroni (1999) et représentent respectivement la moyenne et la variance ajustées. A partir de ces valeurs, il est alors possible de calculer les valeurs critiques relatives à chacun des sept tests.

L'hypothèse nulle testée dans ce test est l'absence de cointégration.

Au cas où les variables du modèle seraient intégrées du même ordre, et qu'on passerait au stade des tests de cointégration, si ces tests concluent que la variable dépendante et les variables explicatives du modèle entretiennent une relation de long terme, il sera

© 2017 Global Journals Inc. (US)

alors pertinent d'envisager de recourir au moindre carré dynamique (DOLS) pour mettre en évidence les relations de court terme et de long terme entre la croissance économique et les variables explicatives. Dans le cas contraire, la méthode d'estimation la plus robuste pour estimer notre modèle tel que spécifié est la méthode des moments généralisés (GMM).

IV. Presentation Des Resultats

Tableau 2: Résultat du test de stationnarité

TEST DE STATIONNARITE (Au seuil de 5%)				
Variables	Dickey-Fuller Augmenté (ADF)		Stationnarité	
	Valeur des Statistiques	Valeur Critique	Oui / Non	Ordre d'Intégration
Y	-2.134348	-1.952910	Oui	I(0)
Y_{t-1}	-2.122898	-1.952910	Oui	I(0)
APD	-2.497015	-1.953858	Oui	I(0)
OUV	-1.996093	-1.956406	Oui	I(0)
INF	-4.040716	-1.952910	Oui	I(0)
EPA	-1.955492	-1.952910	Oui	I(0)
APD*OUV	-2.349072	-1.952910	Oui	I(0)

Le résultat montre que toutes les variables sont stationnaires à niveau, donc nous allons passer directement à l'estimation de notre Modèle par la Méthode des Moments Généralisés qui est la plus efficace pour éviter une régression fallacieuse.

a) Résultats des estimations du modèle de l'impact du commerce extérieur sur l'efficacité de l'APD

Tableau 3: Résultats de l'estimation du modèle de l'impact du commerce extérieur sur l'efficacité de l'APD

Modeles	Estimation avec les variables de contrôle et l'OUV	Introduction de l'APD	Introduction du terme interactif APDxOUV
Variables explicatives	Coefficients (p-value)	Coefficients (p-value)	Coefficients (p-value)
Constante	0.152386 (0.9876)	12.06832 (0.3207)	-20.50927 (0.0700)
Yt-1	0.573367 (0.0000)	0.653262 (0.0000)	0.619543 (0.0000)
IINV	-1.838205 (0.0000)	-2.015065 (0.0000)	-1.433596 (0.0000)
EPA	-5.011343 (0.0000)	-6.011394 (0.0000)	-3.819863 (0.0001)
OUV	14.51544 (0.0000)	12.57130 (0.0000)	15.10656 (0.0000)
INFT	0.131513 (0.0000)	0.113201 (0.0000)	0.144370 (0.0000)
APD		0.422304 (0.0000)	2.369445 (0.0000)
APDxOUV			-0.181871 (0.0000)
R2	0.769339	0.805215	0.845114

© 2017 Global Journals Inc. (US)

Trois équations ont été estimées, le premier modèle est la régression de la croissance sur les variables de contrôle et l'ouverture commerciale(OUV), il ressort que la variation de ses variables indépendants explique à 76,93% la variation de la croissance économique. L'ouverture commerciale a un effet positif et significatif sur la croissance économique. En effet, un accroissement de l'ouverture commerciale de 1% entraine une augmentation de la croissance économique de 14,1%.

En introduisant la variable APD dans l'équation, ce qui donne le second modèle, l'estimation de ce modèle donne un coefficient de détermination de 0,8052. Il ressort que l'aide publique au développement a un impact positif et significatif sur la croissance économique .En effet, une augmentation de l'APD de 1% entraine une augmentation de la croissance économique de 42,23%. On note que l'ouverture commerciale a toujours unimpact positif et significatif sur la croissance économique. L'augmentation de l'ouverture commerciale de 1% entraine une augmentation de la croissance économique de 12.57%. Force est de constater qu'en présence de l'APD, l'effet individuel de l'OUV sur la croissance économique a diminué.

En introduisant dans le modèle précédent le terme interactif APD*OUV, le troisième modèle est spécifié. La variation de la variable explicative de ce modèle explique à 84,51% la variation de la croissance économique qui est la variable dépendante dans ce modèle économétrique.

$$Y_t = -20.509 + 0.619Y_{t-1} - 1.433INV_t - 3.819EPA_t\ 15.106OUV_t + 0.144INFT + 2.369APD_t - 0.1818APDt.OUV_t$$

De cette équation estimée, on déduit la relation suivante:

Efficacité de l'APD = 2,369 - 0,1818OUV

L'effet de l'APD renvoie à l'efficacité de l'APD en termes de croissance économique. il est clair que l'efficacité de l'APD du Cameroun dépend de son niveau d'ouverture commerciale. Plus le pays est ouvert aux échanges commerciaux internationaux moins son APD est efficace.si le Cameroun cesse d'échange avec l'extérieur, une augmentation de 1% de son volume d'APD entrainerait une augmentation de la croissance économique de 2, 36%. Avec un taux de 13,03% d'ouverture commerciale, l'efficacité de l'APD est nulle, au dessus de cette valeur l'APD devient inefficace.

V. Conclusion

Le commerce extérieur a un impact négatif et significatif sur l'efficacité de l'APD au Cameroun. Le solde de la balance commerciale du Cameroun est structurellement déficitaire .l'APD devrait permettre de modifier cette tendance afin d'accroitre son effet sur la croissance économique. La libéralisation commerciale que les pays du Nord impose à certain pays du Sud comme le Cameroun réduit l'efficacité de l'aide publique au développement en termes de croissance économique. Nous plaidons pour la cohérence de la politique de l'APD et la politique Commerciale des pays du Nord à l'égard du Cameroun.

Références Bibliographiques

1. Amewoa A. K., (2008). L'aide publique au développement permet – elle le développement en Afrique subsaharienne, Limoges, presse universitaire.
2. Banque Mondiale (1998), Assessing Aid: What Works, What Doesn't, and Why, Oxford University Press, New York.
3. Burnside C. et Dollar D., (1997), «Aid, Policies, and Growth», World Bank Policy Research working paper, vol. 1777, pp 1-52.
4. Burnside C. et Dollar D., (2000), «Aid, Policies, and Growth», American Economic Review, vol. 90, N0. 4, pp 847-868.
5. Charnoz O. et Severino J-M., (2007), «L'aide publique au développement», Paris, Editions La Découverte, 122 p.
6. Chauvet L. et Guillaumont P., (2007), «Aid, Volatility and Growth Again. When Aid volatility matters and when it does not», CERDI, Etudes et Documents, may, 20p.
7. Collier P. et Dollar D., (2002), «Aid Allocation and Poverty Reduction», European Economic, Review, vol. 46, N0. 8.
8. Dalgaard C-J., Hansen H. et Tarp F., (2004), «On the empirics of foreign aid and growth», The Economic Journal, 114, juin, pp 191-216.
9. Denkabe P., (2003), «Policy, Aid and Growth: A Threshold Hypothesis», Department of Economics, New York university, December.
10. Dollar D. et Easterly W., (1999), «The Search for the Key: Aid, Investment and Policies in Africa », Journal of African Economies, vol. 8, N0. 4, pp 546-477.
11. Dollar D. et Levin V., (2006), «The increasing Selectivity of Foreign Aid, 1984 – 2008 », World Development, vol. 34, N0. 12, pp 2034 – 2046.
12. Guillaumont P. et Chauvet L.,(2001), «Aid and Performance: A Reassessment », Journal of Development Studies, vol. 37, N0. 6.
13. Hansen H. et F. Tarp (2001), «Aid and Growth Regressions», Journal of Development Economics 64 (2).
14. Lensink R. et Morrissey O., (2000), « Aid instability as a measure of uncertainty and the positive impact of aid on growth », Journal of Development Studies, vol. 36.

© 2017 Global Journals Inc. (US)

15. Lensink R. et White H. (2000), «Assessing Aid: A Manifesto for Aid in the 21st Century?» Oxford Development Studies 28(1).
16. MINEPAT (2014), Rapport du DAD-CAMEROON sur l'Aide au Développement.
17. Nafiou M., (2009), « Impact de l'aide publique au développement sur la croissance économique du Niger », Revue africaine de l'intégration, vol 3. N0. 2, octobre.
18. Nyoni T., (1997), «Foreign aid and economic performance in Tanzania», AERC Working Paper No 61, Nairobi.
19. Rajan, R. G., & Subramanian, A. (2008). Aid and growth: What does the cross-country evidence really show?. The Review of Economics and Statistics, 90(4), 643-665.
20. Séverine B., (2004), «Efficacité de l'Aide et Développement. Le Cas de l'Asie de l'Est», Thèse de Doctorat ès Sciences Economiques, Université de la Méditerranée.
21. Severino J-M. et Debrat J M., (2010), «L'aide au développement », éditions le Cavalier bleu.

© 2017 Global Journals Inc. (US)

Global Journals Inc. (US) Guidelines Handbook 2017

www.GlobalJournals.org

FELLOW OF ASSOCIATION OF RESEARCH SOCIETY IN BUSINESS (FARSB)

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



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

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

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

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

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





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

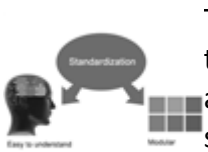
We shall provide you intimation regarding launching of e-version of journal of your stream time to time.This may be utilized in your library for the enrichment of knowledge of your students as well as it can also be helpful for the concerned faculty members.



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

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





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

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



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

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

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



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

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



MEMBER OF ASSOCIATION OF RESEARCH SOCIETY IN BUSINESS (MARSBA)

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



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

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

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



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

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



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



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



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



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

It is mandatory to read all terms and conditions carefully.

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

AUXILIARY MEMBERSHIPS

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

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



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

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

The Institute will be entitled to following benefits:

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

The author fees of such paper may be waived off up to 40%.

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





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

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



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

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

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



After nomination of your institution as "Institutional Fellow" and constantly functioning successfully for one year, we can consider giving recognition to your institute to function as Regional/Zonal office on our behalf.
The board can also take up the additional allied activities for betterment after our consultation.

The following entitlements are applicable to individual Fellows:



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

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



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

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

Other:

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

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

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

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

Note :

"

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

"

Process of submission of Research Paper

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

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

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

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

(II) Choose corresponding Journal.

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

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

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

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



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

Preferred Author Guidelines

MANUSCRIPT STYLE INSTRUCTION (Must be strictly followed)

Page Size: 8.27" X 11'"

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

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

1. General,

2. Ethical Guidelines,

3. Submission of Manuscripts,

4. Manuscript's Category,

5. Structure and Format of Manuscript,

6. After Acceptance.

1. GENERAL

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

Scope

The Global Journals Inc. (US) welcome the submission of original paper, review paper, survey article relevant to the all the streams of Philosophy and knowledge. The Global Journals Inc. (US) is parental platform for Global Journal of Computer Science and Technology, Researches in Engineering, Medical Research, Science Frontier Research, Human Social Science, Management, and Business organization. The choice of specific field can be done otherwise as following in Abstracting and Indexing Page on this Website. As the all Global

Journals Inc. (US) are being abstracted and indexed (in process) by most of the reputed organizations. Topics of only narrow interest will not be accepted unless they have wider potential or consequences.

2. ETHICAL GUIDELINES

Authors should follow the ethical guidelines as mentioned below for publication of research paper and research activities.

Papers are accepted on strict understanding that the material in whole or in part has not been, nor is being, considered for publication elsewhere. If the paper once accepted by Global Journals Inc. (US) and Editorial Board, will become the copyright of the Global Journals Inc. (US).

Authorship: The authors and coauthors should have active contribution to conception design, analysis and interpretation of findings. They should critically review the contents and drafting of the paper. All should approve the final version of the paper before submission

The Global Journals Inc. (US) follows the definition of authorship set up by the Global Academy of Research and Development. According to the Global Academy of R&D authorship, criteria must be based on:

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

2) Drafting the paper and revising it critically regarding important academic content.

3) Final approval of the version of the paper to be published.

All authors should have been credited according to their appropriate contribution in research activity and preparing paper. Contributors who do not match the criteria as authors may be mentioned under Acknowledgement.

Acknowledgements: Contributors to the research other than authors credited should be mentioned under acknowledgement. The specifications of the source of funding for the research if appropriate can be included. Suppliers of resources may be mentioned along with address.

Appeal of Decision: The Editorial Board's decision on publication of the paper is final and cannot be appealed elsewhere.

Permissions: It is the author's responsibility to have prior permission if all or parts of earlier published illustrations are used in this paper.

Please mention proper reference and appropriate acknowledgements wherever expected.

If all or parts of previously published illustrations are used, permission must be taken from the copyright holder concerned. It is the author's responsibility to take these in writing.

Approval for reproduction/modification of any information (including figures and tables) published elsewhere must be obtained by the authors/copyright holders before submission of the manuscript. Contributors (Authors) are responsible for any copyright fee involved.

3. SUBMISSION OF MANUSCRIPTS

Manuscripts should be uploaded via this online submission page. The online submission is most efficient method for submission of papers, as it enables rapid distribution of manuscripts and consequently speeds up the review procedure. It also enables authors to know the status of their own manuscripts by emailing us. Complete instructions for submitting a paper is available below.

Manuscript submission is a systematic procedure and little preparation is required beyond having all parts of your manuscript in a given format and a computer with an Internet connection and a Web browser. Full help and instructions are provided on-screen. As an author, you will be prompted for login and manuscript details as Field of Paper and then to upload your manuscript file(s) according to the instructions.

To avoid postal delays, all transaction is preferred by e-mail. A finished manuscript submission is confirmed by e-mail immediately and your paper enters the editorial process with no postal delays. When a conclusion is made about the publication of your paper by our Editorial Board, revisions can be submitted online with the same procedure, with an occasion to view and respond to all comments.

Complete support for both authors and co-author is provided.

4. MANUSCRIPT'S CATEGORY

Based on potential and nature, the manuscript can be categorized under the following heads:

Original research paper: Such papers are reports of high-level significant original research work.

Review papers: These are concise, significant but helpful and decisive topics for young researchers.

Research articles: These are handled with small investigation and applications

Research letters: The letters are small and concise comments on previously published matters.

5.STRUCTURE AND FORMAT OF MANUSCRIPT

The recommended size of original research paper is less than seven thousand words, review papers fewer than seven thousands words also.Preparation of research paper or how to write research paper, are major hurdle, while writing manuscript. The research articles and research letters should be fewer than three thousand words, the structure original research paper; sometime review paper should be as follows:

Papers: These are reports of significant research (typically less than 7000 words equivalent, including tables, figures, references), and comprise:

(a)Title should be relevant and commensurate with the theme of the paper.

(b) A brief Summary, "Abstract" (less than 150 words) containing the major results and conclusions.

(c) Up to ten keywords, that precisely identifies the paper's subject, purpose, and focus.

(d) An Introduction, giving necessary background excluding subheadings; objectives must be clearly declared.

(e) Resources and techniques with sufficient complete experimental details (wherever possible by reference) to permit repetition; sources of information must be given and numerical methods must be specified by reference, unless non-standard.

(f) Results should be presented concisely, by well-designed tables and/or figures; the same data may not be used in both; suitable statistical data should be given. All data must be obtained with attention to numerical detail in the planning stage. As reproduced design has been recognized to be important to experiments for a considerable time, the Editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned un-refereed;

(g) Discussion should cover the implications and consequences, not just recapitulating the results; conclusions should be summarizing.

(h) Brief Acknowledgements.

(i) References in the proper form.

Authors should very cautiously consider the preparation of papers to ensure that they communicate efficiently. Papers are much more likely to be accepted, if they are cautiously designed and laid out, contain few or no errors, are summarizing, and be conventional to the approach and instructions. They will in addition, be published with much less delays than those that require much technical and editorial correction.

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

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

Format

Language: The language of publication is UK English. Authors, for whom English is a second language, must have their manuscript efficiently edited by an English-speaking person before submission to make sure that, the English is of high excellence. It is preferable, that manuscripts should be professionally edited.

Standard Usage, Abbreviations, and Units: Spelling and hyphenation should be conventional to The Concise Oxford English Dictionary. Statistics and measurements should at all times be given in figures, e.g. 16 min, except for when the number begins a sentence. When the number does not refer to a unit of measurement it should be spelt in full unless, it is 160 or greater.

Abbreviations supposed to be used carefully. The abbreviated name or expression is supposed to be cited in full at first usage, followed by the conventional abbreviation in parentheses.

Metric SI units are supposed to generally be used excluding where they conflict with current practice or are confusing. For illustration, 1.4 l rather than 1.4 × 10-3 m3, or 4 mm somewhat than 4 × 10-3 m. Chemical formula and solutions must identify the form used, e.g. anhydrous or hydrated, and the concentration must be in clearly defined units. Common species names should be followed by underlines at the first mention. For following use the generic name should be constricted to a single letter, if it is clear.

Structure

All manuscripts submitted to Global Journals Inc. (US), ought to include:

Title: The title page must carry an instructive title that reflects the content, a running title (less than 45 characters together with spaces), names of the authors and co-authors, and the place(s) wherever the work was carried out. The full postal address in addition with the e-mail address of related author must be given. Up to eleven keywords or very brief phrases have to be given to help data retrieval, mining and indexing.

Abstract, used in Original Papers and Reviews:

Optimizing Abstract for Search Engines

Many researchers searching for information online will use search engines such as Google, Yahoo or similar. By optimizing your paper for search engines, you will amplify the chance of someone finding it. This in turn will make it more likely to be viewed and/or cited in a further work. Global Journals Inc. (US) have compiled these guidelines to facilitate you to maximize the web-friendliness of the most public part of your paper.

Key Words

A major linchpin in research work for the writing research paper is the keyword search, which one will employ to find both library and Internet resources.

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

Search engines for most searches, use Boolean searching, which is somewhat different from Internet searches. The Boolean search uses "operators," words (and, or, not, and near) that enable you to expand or narrow your affords. Tips for research paper while preparing research paper are very helpful guideline of research paper.

Choice of key words is first tool of tips to write research paper. Research paper writing is an art.A few tips for deciding as strategically as possible about keyword search:

- One should start brainstorming lists of possible keywords before even begin searching. Think about the most important concepts related to research work. Ask, "What words would a source have to include to be truly valuable in research paper?" Then consider synonyms for the important words.
- It may take the discovery of only one relevant paper to let steer in the right keyword direction because in most databases, the keywords under which a research paper is abstracted are listed with the paper.
- One should avoid outdated words.

Keywords are the key that opens a door to research work sources. Keyword searching is an art in which researcher's skills are bound to improve with experience and time.

Numerical Methods: Numerical methods used should be clear and, where appropriate, supported by references.

Acknowledgements: Please make these as concise as possible.

References

References follow the Harvard scheme of referencing. References in the text should cite the authors' names followed by the time of their publication, unless there are three or more authors when simply the first author's name is quoted followed by et al. unpublished work has to only be cited where necessary, and only in the text. Copies of references in press in other journals have to be supplied with submitted typescripts. It is necessary that all citations and references be carefully checked before submission, as mistakes or omissions will cause delays.

References to information on the World Wide Web can be given, but only if the information is available without charge to readers on an official site. Wikipedia and Similar websites are not allowed where anyone can change the information. Authors will be asked to make available electronic copies of the cited information for inclusion on the Global Journals Inc. (US) homepage at the judgment of the Editorial Board.

The Editorial Board and Global Journals Inc. (US) recommend that, citation of online-published papers and other material should be done via a DOI (digital object identifier). If an author cites anything, which does not have a DOI, they run the risk of the cited material not being noticeable.

The Editorial Board and Global Journals Inc. (US) recommend the use of a tool such as Reference Manager for reference management and formatting.

Tables, Figures and Figure Legends

Tables: Tables should be few in number, cautiously designed, uncrowned, and include only essential data. Each must have an Arabic number, e.g. Table 4, a self-explanatory caption and be on a separate sheet. Vertical lines should not be used.

Figures: Figures are supposed to be submitted as separate files. Always take in a citation in the text for each figure using Arabic numbers, e.g. Fig. 4. Artwork must be submitted online in electronic form by e-mailing them.

Preparation of Electronic Figures for Publication

Even though low quality images are sufficient for review purposes, print publication requires high quality images to prevent the final product being blurred or fuzzy. Submit (or e-mail) EPS (line art) or TIFF (halftone/photographs) files only. MS PowerPoint and Word Graphics are unsuitable for printed pictures. Do not use pixel-oriented software. Scans (TIFF only) should have a resolution of at least 350 dpi (halftone) or 700 to 1100 dpi (line drawings) in relation to the imitation size. Please give the data for figures in black and white or submit a Color Work Agreement Form. EPS files must be saved with fonts embedded (and with a TIFF preview, if possible).

For scanned images, the scanning resolution (at final image size) ought to be as follows to ensure good reproduction: line art: >650 dpi; halftones (including gel photographs) : >350 dpi; figures containing both halftone and line images: >650 dpi.

Color Charges: It is the rule of the Global Journals Inc. (US) for authors to pay the full cost for the reproduction of their color artwork. Hence, please note that, if there is color artwork in your manuscript when it is accepted for publication, we would require you to complete and return a color work agreement form before your paper can be published.

Figure Legends: Self-explanatory legends of all figures should be incorporated separately under the heading 'Legends to Figures'. In the full-text online edition of the journal, figure legends may possibly be truncated in abbreviated links to the full screen version. Therefore, the first 100 characters of any legend should notify the reader, about the key aspects of the figure.

6. AFTER ACCEPTANCE

Upon approval of a paper for publication, the manuscript will be forwarded to the dean, who is responsible for the publication of the Global Journals Inc. (US).

6.1 Proof Corrections

The corresponding author will receive an e-mail alert containing a link to a website or will be attached. A working e-mail address must therefore be provided for the related author.

Acrobat Reader will be required in order to read this file. This software can be downloaded

(Free of charge) from the following website:

www.adobe.com/products/acrobat/readstep2.html. This will facilitate the file to be opened, read on screen, and printed out in order for any corrections to be added. Further instructions will be sent with the proof.

Proofs must be returned to the dean at dean@globaljournals.org within three days of receipt.

As changes to proofs are costly, we inquire that you only correct typesetting errors. All illustrations are retained by the publisher. Please note that the authors are responsible for all statements made in their work, including changes made by the copy editor.

6.2 Early View of Global Journals Inc. (US) (Publication Prior to Print)

The Global Journals Inc. (US) are enclosed by our publishing's Early View service. Early View articles are complete full-text articles sent in advance of their publication. Early View articles are absolute and final. They have been completely reviewed, revised and edited for publication, and the authors' final corrections have been incorporated. Because they are in final form, no changes can be made after sending them. The nature of Early View articles means that they do not yet have volume, issue or page numbers, so Early View articles cannot be cited in the conventional way.

6.3 Author Services

Online production tracking is available for your article through Author Services. Author Services enables authors to track their article - once it has been accepted - through the production process to publication online and in print. Authors can check the status of their articles online and choose to receive automated e-mails at key stages of production. The authors will receive an e-mail with a unique link that enables them to register and have their article automatically added to the system. Please ensure that a complete e-mail address is provided when submitting the manuscript.

6.4 Author Material Archive Policy

Please note that if not specifically requested, publisher will dispose off hardcopy & electronic information submitted, after the two months of publication. If you require the return of any information submitted, please inform the Editorial Board or dean as soon as possible.

6.5 Offprint and Extra Copies

A PDF offprint of the online-published article will be provided free of charge to the related author, and may be distributed according to the Publisher's terms and conditions. Additional paper offprint may be ordered by emailing us at: editor@globaljournals.org .

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



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

TECHNIQUES FOR WRITING A GOOD QUALITY RESEARCH PAPER:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

Informal Guidelines of Research Paper Writing

Key points to remember:

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

Final Points:

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

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

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

General style:

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

To make a paper clear

· Adhere to recommended page limits

Mistakes to evade

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

In every sections of your document

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

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

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

· Align the primary line of each section

· Present your points in sound order

· Use present tense to report well accepted

· Use past tense to describe specific results

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

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

Title Page:

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



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

Abstract:

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

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

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

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

Approach:

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

Introduction:

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

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

Approach:

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

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

Procedures (Methods and Materials):

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

Materials:

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

Methods:

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

Approach:

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

What to keep away from

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

Results:

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

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



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

Content

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

What to stay away from

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

Approach

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

Figures and tables

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

Discussion:

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

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

Approach:

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

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

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

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

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

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



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

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

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

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

Index

A

Alleviation · 1, 8, 9, 10
Augmenter · 12

C

Caricaturale · 50

D

Decennial · 2

M

Matriculate · 9
Mauvaise · 49
Mondiaux · 13

P

Paiements · 12, 14, 22
Portefeuille · 13
Poursuivre · 51
Pratiquement · 12, 13
Purveying · 3

R

Renchérissent · 51

T

Trouvait · 49





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