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By Oletubo.O.A & Gbadegesin Job Taiwo

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Abstract- The aim of this paper is to investigate tenant selection criteria adopted by the registered real estate firms and the relationship between the criteria and the firms' years of experience in property management practice, core areas of professional practice and size of the firms with a view to determining the important criteria required of prospective tenant(s) to secure a rental apartment in the developing property market of Metropolitan Ibadan.The study adopts a questionnaire survey. The instruments (Tenant Assessment Checklists) were administered on a sample of estate surveying and valuation firms (registered real estate firms). Data collected were analysed using discriptive statistics, factor analysis, cluster analysis and chi-square.

ANALYSISOFTENANTSELECTION CRITERIAINANEMERGING RENTALMARKET

Strictly as per the compliance and regulations of:

Analysis of Tenant Selection Criteria in an Emerging Rental Market

Oletubo, Adebayo. A.[α] & Gbadegesin Job Taiwo[σ]

Abstract- The aim of this paper is to investigate tenant selection criteria adopted by the registered real estate firms and the relationship between the criteria and the firms' years of experience in property management practice, core areas of professional practice and size of the firms with a view to determining the important criteria required of prospective tenant(s) to secure a rental apartment in the developing property market of Metropolitan Ibadan.The study adopts a questionnaire survey. The instruments (Tenant Assessment Checklists) were administered on a sample of estate surveying and valuation firms (registered real estate firms). Data collected were analysed using discriptive statistics, factor analysis, cluster analysis and chi-square. It is found that while the respondent property managers(agents) base their selection criteria on tenant reputation, tenant impact record, tenancy report and size of the need in rental housing, prospective tenant's proposal, affordability and the reputation are the factors considered in commercial leases. It is also found that while there is significant relationship between the firms' core areas of professional practice and the tenant selection criteria, there is no significant relationship between the firms' years of property management practice, size of the firms and tenant selection criteria adopted in rental housing market.

Keywords: *tenant selection, criteria, real estate firm, profiles, ibadan.*

I. Introduction

The high rate of urbanization, pooled effect of population upsurge and dwindling economy in Nigeria have necessitated the significance of rental properties in most cities. Younger and more mobile people in work are the main clients of the private rented sector. Many tenants choose to rent because it is convenient. It is often stated that private tenants have a broadly similar distribution of income to the population as a whole, with a somewhat higher share of middle and lower income groups and a markedly smaller share of those with the highest incomes (Ball, 2010). Based on the fact that the demand for rental housing overshoots the supply in the market, the lucrativeness of investing in it in virtually every city of Nigeria is justifiable.

It is important however to state that the success of investing in rental properties is determined partly by space consumers' (tenants') attributes. The cases of indiscrimate destruction of properties, breach of covenant and rental default are common in varied degrees and categories of lease. Gbadegesin and Ojo (2012) examine the menace of recalcitrant tenants in metropolitan Ibadan. It is found that the issue of

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recalcitrance is common even among the law enforcement agents. The remedy to curbing difficult tenants commences at the beginning of lease. Currently, in the market, the aspect of tenant selection suffers heavy set-backs, blamed upon the discretional criteria attached to tenant selection and the over-reliance on the years of property management practice , core professional specialization and the real estate firms' capacity. Amidst several prospective competitive tenants, it is pertinent to select the appropriate tenant to occupy a vacancy without any element of bias. Choosing a tenant not at "arm's length" transaction is tantamount to a wrong selection. Ethnic sentiment could also result to bias selection and consequently affect the aim of the investment which usually manifests in form of rental default (Gbadegesin and Ojo, 2013).

In Nigeria property market, investors (Landlords) traditionally consider real estate firms' years of practice in property management, core areas of professional practice and the size of the firms before entrusting their interest on the firm for proper caretaking. This is necessary as it is generally believed that in the event of litigation, a client (Landlord) in contract would comfortably argue his or her position effectively and legally in the law court or before the arbitration as the case may be.

It is also important to posit that the basis of tenant selection in the metropolis can be attributed to certain attributes peculiar to the real estate companies. The result of the pilot surveyindicates that the bulk of the market fault is usually blamed on the profiles vis-a vis qualifications of the agents in Nigeria and hence generating these salient questions:

- What are the profiles of the registered estate surveying and valuation firms who statutorily engaged in real estate agency in the area?.
- What are the criteria for selecting tenants in the real estate industry?.
- Is there any significant relationship between the firms' years of practice in property management (agency) and the tenant selection criteria adopted?.
- Is there any significant relationship between the firms' core area of professional practice in real estate and the selection criteria adopted?.
- Is there any significant relationship between the firms' size in term of staff capacity and criteria adopted in tenant selection?

Against the foregoing questions, the study examines the following issues:

1. The profiles of the registered property firms in the metropolis.
2. Tenant selection criteria adopted in the area.
3. Relationship between the selection criteria and the firms' years of experience in property management practice.
4. Relationship between the firms' core area of professional practice and the selection criteria.
5. Relationship between the firms' size and the the selection criteria adopted.

Hence, the last three objectives postulate the following hypotheses:

Hypothesis I: There is no significant relationship between the firm's year of experience in property management practice and tenant selection criteria adopted.

Hypothesis II: There is no significant relationship between the firms' core area of professional practice and tenant selection criteria adopted.

Hypothesis III: There is no significant relationship between the size of the real estate firms and the selection criteria adopted.

II. Tenant Selection Criteria In Nigeria

In Nigeria property market, there is no any legal instrument that outlines the criteria to adopt while selecting tenants in private rental market. Theoretically, scholars identify various methods or criteria that screen tenants. Oni (2011) opines that the main objective of investing in private rental property is to derive adequate returns which is only achievable through selection of suitable tenants. In the study, the author identifies some of the criteria commonly considered by estate surveyors and valuers (property managers) in Lagos metropolis which include income, advance rent payment, occupation/employment; job prospects, marital status, tribe, physical appearance, religion, sex and number of children. However, some of these criteria are not really applicable to most Nigerian property market for example, job prospects and physical appearance. It is rare at the first instance to grant an apartment to a space applicant without initial inquiry on his/her occupation. Also appearance assessment is not usually applicable.

In literature, affordability is one of the criteria considered while selecting tenants JCHSHU (2008) and Bello (2008) opine that rental affordability is a determinant factor of rental investment in most developing nations. This is partly related to the tenant reputation. In term oftenant income status, (Oni, 2010) refers to non-payment of rent as a fragrant breach of tenancy agreement. This is usually avoided through express demand for affordability evidence, criminality record/track record, police report and quality of reference/guarantorship. Criteria can also be based on the circumstances of the prospective tenant. Carter (1980) posits that lone parent (single parent) either by circumstance of death, divorce or separation, or low income status would be unable to afford rents for adequate accommodation in the private market and will lack financial resources to overcome barriers to entry that may exist (for example, bonds and rent in advance). Singling out lone parent families for particular attention in terms of housing access may be justified to the degree of the fact that they face special problems.

In the opinion of Sweet (1959), emphasis on planned or limited competition, protection, against undue competition from new tenants, and limitation of the introduction of new merchandise lines by existing tenants are also germane. According to the author, retailers who are too aggressive or unorthodox in their merchandising policies are not wanted. In other word, tenant selection is based on the history and proposal on the usage of the apartment or space requested for. However, this is particularly related to commercial lease as examined in Table V.

Other criteria considered include the public interest (impact), legal aspect and innovator which storically has been considered a disturbing element (Sweet, 1959). The type of tenant, in term of influence and prestige is also factor usually considered in selecting tenant (Brzowski, 2008; Ojo, 2003). This usually occurs in the form of age factor, community involvement record and potential impact to the building. Current tenancy status is one of the criteria identified by Saaty (1991). This constitutes family size, current occupancy/needs and duration of the current lease.

In summary, it implies from literature that tenant selection criteria have to do with either current tenancy status, impact, proposed use or reputation. Consequently, this study identifies these criteria and empirically examins the basis for adopting each of them in the process of tenant selection. It is further examined against the three important profiles of the firms namely; years of experience in property management practice- the task under which tenant selection responsibility takes place, core areas of professional practice, and size of the firms sampled.

III. Brief on the Study Area

Nigeria is one of the few countries in Africa which had many large pre-industrial cities before the colonial period. The largest concentration of such towns was in the south-western zone, which is by far the most urbanized area of its size in sub-Saharan Africa (NISER 1997). Ibadan is the largest indigenous city in West Africa and is located in the South Western part of Nigeria. It is the capital city of Oyo State and is located about 145 km north-east of Lagos, the former federal

capital of Nigeria. . As the dominant urban centre in Oyo State, its administrative and commercial functions transcend beyond the city boundaries. Its population is 2,550,593 according to 2006 census results, including 11 local government areas. The population of central Ibadan, including five Local Government Areas, is 1 338 659 according to census results for 2006, covering an area of 128 km². Eleven Local Government Areas are grouped together to what is called the Ibadan region or Ibadan land .The growth rate of the population of about 2,550,593 is 5.3%. Economic activities undertaken by people in Ibadan include trading, public service employment, and agriculture in decreasing order of importance. The administrative and commercial importance of Ibadan has resulted in land being a key investment asset and a status symbol for the population. Ibadan houses the oyo state government secretariat, University & Research such as University of Ibadan: Agronomy & Extension and Rural DevelopmentDepartment, National Horticultural Research Institute, (NIHORT), Institute of Agricultural Research and Training, (IAR&T).Credit Institutions such as Nigeria Agricultural, Cooperative and Rural Development Bank & Nigeria Agricultural Insurance Corporation which are the reasons while international expatriates reside in the city. Non Government Organizations such as Justice Development & Peace Commission, Archdiocese of Ibadan, CENRAD and Farmer Development Union (FADU). A general higher price of building materials has also increased the property market in the 1990s. The building of the Ibadan-Lagos expressway has encouraged many Lagosian workers to live in Ibadan where accommodation was considered relatively cheaper. This new influx has had an important influence on Ibadan's property market as demand rises, giving estates agents and landlords opportunity to decide on rent. The general increase of the property market in the whole city led the urban poor to find rooms in the cheapest areas of Ibadan, the inner city and peripheral slums.

IV. Policy Implication for Public Rental and Social Housing System in Nigeria.

Housing is highly interconnected and interdependent system. When this system is weak or incomplete, access to safe, affordable, and suitable housing is compromised; this in turn negatively impacts other sectors in a community (MacCashin, 2000). Part of government intervention in housing is the proposition to launch social housing in Nigeria. Social housing is more of non-profit housing scheme than private style that offers a valuable service to communities across state. A number of compounding problems are presumed as threats to the sustainability of housing sector as indicated by Land and housing committee at the floor of

national assembly (Akeju, 2007; Mousseau, 2008). Meanwhile, parts of the new agenda that do exist now are highly targeted towards households requiring complex supports. The era ofgovernment and non-profit housing providers therefore need to find new and innovative ways of maintaining the viability and sustainability of rental and social housing for all once the challenges in the market are resolved. The challenges such as tenant selection problem, real estate companies' deficiencies, rental default etc have significant impact on any rental market policy and social housing scheme. This research presents an ideal opportunity for the built environment to explore strategies that will help maintain the existing stock of housing units and ensure long-term sector sustainability.

A lack of affordable rental units will strain emergency shelters and other subsidized forms of housing, just as a lack of supportive housing options for the elderly and disabled will lead to greater demand for more costly long-term care facilities and hospital beds (Federation of Canadian Municipalities 2008). The implication is that markets with an adequate supply of affordable housing of different types, tenures, and price points are able to attract and retain a broad labour force and ensure economic well-being. Housing is a key determinant of well-being of not just individuals or households, but of communities and regions as well. An effective housing system can therefore address more than simply the need for affordable housing – it can directly address the health and well-being of individuals, their communities, and the economy (Pomeroy 2004). Against the foregoing reasons, this study hence is considered a policy framework for decision making on both public rental housing and proposed social housing due to the following stance:

Tenant relationships are an important concern for the owner and the property manager of any property. Tenants are the revenue source for the property and therefore are a key element in the financial success of the property. Tenant relationships start before the signing of the lease and continue after the lease is in effect. The pre-lease phase of tenant relationships consists of themarketing program initiated for the property, the tenant selection criteria and process, and the fair housing implications of the tenant selection process. Tenant relationships after the signing of the lease include rent collection procedures, security deposits policies, move-in and move-out policies, and tenant relationships during the term of the lease (Mousseau, 2008).

Housing policies and markets have implications for the level of public expenditure, the labour market, the quality of the physical and social infrastructure, the operation of financial markets and the financial and social well being of the population (housing consumers). In a scenario where social partners and government are attempting to formulate framework to guide the rental

housing and prospective social housing, the role that selection criteria and real estate agents play in shaping the task of effective tenancy management would be based on affordability. In the light of this, policy has to be reconsidered .For instance where public policy focuses excessively on encouraging owners to acquire accommodation in excess of their needs, tending to create a combination of "over housing" at one end of the system and "under housing" at the other households with incomes below the poverty line will be less likely to afford adequate housing at market prices without some state intervention. The state response to the need of the poor and those on lower incomes may itself exacerbate social exclusion in the way in which housing is structured and provided (MacCashin, 2000).

V. Research Method

The study adopts a questionnaire survey method. Structured questionnaires were administered on the intact sample of 62 practising estate surveyors'

and valuers' firms out of the registered 67 firms. Out of which 44 (72%) of the instruments were returned complete and valid for the study. This study is limited to the licensed agents in one of the single largest city in West Africa. It is a purposive study, targeted to all the registered/ licensed Estate Surveyors andValuers in the metropolis. The respondents are the statutorily recognized professionals saddled with responsibility to formally carry out the property management duties (tenant selection inclusive) in the property market. However, this does not overrule the fact that there are quacks (unregistered agents) in the market. In this study, the professional opinion is considered superior to that of non-professional. The demographics or profiles of the sampled firms is presented in Table I.

Table 1 : Descriptive Analysis of the Property Agents' and Firm's Demograpics

		Frequency	Percent
Gender	MALE	36	81.8
	FEMALE	8	18.2
	Total	44	100.0
Qualification	NATIONAL DIPLOMA	1	2.3
	HND	11	25.0
	BACHELOR DEGREE	19	43.2
	MASTER DEGREE	10	22.7
	OTHER (Ph.D)	2	4.5
	No Response	1	2.3
	Total	44	100.0
Professional Qualification	ANIVS	34	77.3
	FNIVS	8	18.2
	No Response	2	4.5
	Total	44	100.0
Years of experience	1-5 years	1	2.3
	6-10 yrs	21	47.7
	11-15 yrs	6	13.6
	16-20 yrs	3	6.8
	above 20 yrs	13	29.5
	Total	44	100.0
SIZE (Staff/employee)	1-5	34	77.3
	6-10	7	16.0
	11-15	1	2.3
	16-20	1	2.3
	above 20	1	2.3
	Total	44	100.0
Scope of Service	Property management/agency	11	25.0
	General real estate service	33	75.0
	Total	44	100.0
		Frequency	Percent

Gender	MALE	36	81.8
	FEMALE	8	18.2
Firm Status	HEADQUARTER	31	70.5
	BRANCH	10	22.7
	No response	3	6.8
	Total	44	100.0
Location	CBD	11	25.0
	ALONG MAJOR ROAD	29	65.9
	OTHERS	3	6.8
	No response	1	2.3

The discriptive analysis in Table I indicates the following items:

Gender, Academic and Professional Qualifications

36 (82%) of the respondent Estate Surveyors and Valuers were male who also possess the requisite academic qualifications of either Barchelor degree,19 (43%) or Higher National Diploma (HND), 11 (25%) and duely qualified in the field of real estate management with 34 (77%) Associate membership cadre and 8 (18%) fellow membership cadre.

Years of Experience and Professional Experience

It is also indicated that larger percentage, 17 (39%) possess 6-10 years of experience and 13 (30%) have above 20years of experience. Also majority of the respondent property agents are well familiar with real estate professional services with 11 (25%) majorly devote to property management(agency) while 33 (75%) generally practise in all areas of the profession. This implies that the respondents possess the requisite qualifications and experience that qualify them suitable to supply the data required in respect of this study.

Size of the Firms

Table I indicates that about 41(93.2%) have their staff capacity ranges within 1 to 10 staff and majority 31 (71.5%) of the firms situate their head offices at the study area.

VI. Empirical Analysis and Discussion

To identify the criteria for tenant selection in residential and commercial property market, several conditions which respondents indicated that they consider in tenant selection for residential leases as indicated in section B of the questionnaire were subjected to Principal Component Analysis (PCA) starting with the original data matrix and extracting principal factors after interacting of communalities. Each factor with an eigenvalue greater than 1 was then retained for rotation. The procedure yielded four factors as presented in Table II

Table 2 : Rotated Component Matrixa

Code	Items	Component			
		1	2	3	4
Q20	Police Report	.786	.463		
Q16	Financial Soundness/income status	.780			
Q21	Quality of reference/guarantorship	.654		.429	
Q18	Criminality History/Track Record	.571			.486
Q14	Community Impact use		.925		
Q15	Potential Value to the Building		.636	.485	
Q19	Compatibility with the neighbors		.616		.437
Q13	Current Tenancy report			.849	
Q17	Reason for the proposed tenancy			.667	
Q11	Tenancy trends			.666	
Q12	Current Occupancy Needs				.742
Q10	Matching family size to the apartment size				.677

a. *Rotation converged in 6 iterations.*

The componentss were then identified by locating the central theme that connects the listed items and the result is again presented in Table III.

Table 3 : Categorization of Components

S/N	Components	Items involved	Component identification
1	Component 1	B95, B97, B99, B100	Tenant's personalities Report
2	Component2	B92, B93, B94	Tenant's impact record
3	Component 3	B90, B96, B98	Tenancy report
4	Component 4	B89, B91, B 92	Size of the current need

It can therefore be concluded from the foregoing that the property managers (agents) base their tenancy selection in residential leases on four major criteria – tenant's personalities report, tenant's impact record, tenancy report and size of the current need. The responses were also subjected to hierarchical cluster analysis to determine the relative frequeency of the respondents prevalent considerations in tenant selection in residential leases. Four clusters were obtained and the result is presented in Table IV.

Table 4 : Relative Proportion of Usage of different Tenant Selection Approaches

Approaches	Frequency	Percentage
Tenant's personalities/ reputation	16	36.4
Tenant impact record	4	9.1
Tenancy report	22	50.0
Size of the current need	2	4.5
Total	**44**	**100.0**

Table IV shows the distribution of the respondents across the prevalent tenant selection approaches. It can be seen from Table IV that most of the respondents (50%) consider tenants' report as the major criteria they consider in the process of tenant selection, 36% considertenants' reputation while only 9.1% consider tenants' impact record and 4.5% consider the size of the current need. This implies that the property managers in the area are much more concerned on the reputation than issues that bother on tenancy report which consequently might be the cause of irregularities that emanate in the metropolitan rental market.

Furthermore, conditions commonly considered in tenant selection in commercial leases as indicated in section B of the questionnaire were also subjected to Principal Component Analysis (PCA) starting with the original data matrix and extracting principal factors after interacting of communalities. Each factor (component) with an eigenvalue greater than 1 was again retained for rotation. This procedure yielded only 3 factors (components) as presented in Table V

Table 5 : Rotated Component Matrixa

Code	Items	Component		
		1	2	3
Q23	Potential values to the properties	.830		
Q25	Proposed or planned use	.693		
Q22	Economic benefit of use	.665		
Q29	Actual needs of tenants	.617	.541	
Q26	Tenant paying history		.874	
Q24	Financial soundness		.817	
Q28	Quality of reference/guarantorship			.861
Q27	Police report			.851

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

The Components were then identified by locating the central theme that connects the listed items and the result is again presented in Table VI.

Table 6 : Components Identification of Items

S/N	Components	Items involved	Component identification
1	Component 1	B103, B105, B106, B102	Proposal consideration
2	Component 2	B101, B104	Tenant's affordability
3	Component 3	B107, B108	Tenant's reputation/personalities

It can therefore be concluded from the foregoing that the property managers (agents) base their tenancy selection in commercial leases on three major criteria – proposal consideration, tenant's affordability and tenant's reputation. Also, the responses were subjected to hierarchical cluster analysis to determine the relative frequency of the respondents prevalent considerations in tenenat selection in commercial leases. Three clusters were obtained and the result is presented in Table VII

Table 7 : Cluster Analysis of the Commercial Tenant Selection Criteria

Approaches	Frequency	Percentage
Proposal consideration	32	72.7
Tenant's affordability	2	4.5
Tenant's reputation	10	22.7
Total	**44**	**100.0**

Table VII shows the distribution of the agents across the prevalent commercial tenant selection approaches. It can be seen from Table VII that most of the respondents (72.7%) consider proposal consideration as the prevalent criteria they consider in course of tenant selection, 22.7% consider as prevalent the tenant's reputation while only 4.5% consider tenant's affordability. This implies that the property managers in the area are much more concerned on the proposal of the prospective tenants amidst the competitive space applicants, which perhaps might be the cause of irregularities that emanate in the rental market.

In the foregoing analyses, factor analysis is used to uncover the latent structure (dimension) of a set of variables. It creates a set of factors to be treated as uncorrelated variables as one approach to handling multicollinearity in such procedures as multiple regression. Factor loadings also called component loadings in PCA, are the corvariables (rows) and factors (columns). The data was firstly tested for suitability of factor analysis to extract distinct and reliable factors (components). The value of the determinant obtained was approximately 0.006 which is greater than the 0.00001 value recommended by Fields (2005) beyond which Multicollinearity can be said to set in and in which factorial validity will no longer be suitable for exploring the data for reliable and distinct factors. Further, the KMO value obtained in the suitability test was 0.612.

Fields (2005) asserted that when the KMO value is close or equal to zero, the pattern of correlations are diffused and hence factor analysis would be inappropriate for exploring the data, but when it is close to or equal to 1 the patterns of correlation are relatively compact and factor analysis would yield a set of distinct and reliable factors. Kaiser (1974) recommended accepting values greater than 0.5 as acceptable. Since the KMO values is greater than 0.5, it is said to be acceptable. The value of Bartlett's Test of Sphericity (BTS) is 186.257 at $p < 0.05$. The significance values for BTS shows that the correlation matrix of the test was not identity matrices and hence from the foregoing it can be concluded that factorial validity would be appropriate for exploring the data and that the items are uniform enough to yield distinct factors.

Again, it is also important to state that Bartlett's test of sphericity should be significant. At a minimum, there must be more scenarios as done in this study (instrument attached-appendix). Concerning adequate sample size, Garson (2012), posits that there is no scientific answer to this question, and methodologists differ. It is part of the universal agreement that at least ten cases in the instrument, this study has been conditionally stated to be limited to the licensed agents in one of the single largest city in West Africa, which is appropriate with that assertion. It is a purposive sample targeted to all the registered/ licensed Estate Surveyors

and Valuers in the metropolis. The respondents are the statutorily recognized professionals to relation coefficients between theformally carry out the duties in the property market. However, this does not overrule the fact that there are quacks (unregistered agents) in the market. In this study, the professional opinion is superior to that of non-professional.

Having ascertained the suitability of the methodology, the data were subjected to factor analysis. It began with the original data matrix followed by using multiple correlations as the estimates of communalities, principal factors were extracted after interacting of communalities. Factors with eigenvalue greater than 1 were retained for rotation. The eigenvalue (characteristic roots) for a given factor, measures the

variance in all the variables which is accounted for by that factors Garson (2012). The ratio of eigenvalues is the ratio of explanatory importance of the factor with respect to the variables. If a factor has a low eigenvalue, then it is contributing little to the explanation of variances in the variables and may be ignored as redundant with more important factors.

To test the first hypothesis on the relationship between the real estate companies' years of property management practice and the selection criteria, the number of years of working experience of the property managers (agents) in property management was cross-tabulated with the criteria adopted by the firm during tenant selection. The chi-square statistics was also computed. The result is presented in Table VIII.

Table 8 : Relationship between Years of Experience in Property Management and Tenant Selection Criteria in Rental Housing

| EXPERIENCE | Criteria for Tenant Selection | | | | | df | χ^2 | p |
	Tenant's reputation	Tenant impact record	Tenant neport	Size of the current need	Total			
1-5 years	0	0	1	0	1			
6-10 yrs	7	2	11	1	21			
11-15 yrs	1	1	4	0	6	12	11.708	0.469
16-20 yrs	2	0	0	1	3			
above 20 yrs	6	1	6	0	13			
Total	16	**4**	22	2	44			

Table VIII shows the relationship between years of experience in property management, and criteria for tenant selection. It can be seen that the chi-square value obtained is 11.708 with p-value of 0.469. Since the p-value is greater than 0.05, it canbe concluded that there is no significant relationship between years of experience in property management, and their criteria

for tenant selection, such that any relationship observed can only be attributed to sampling error or mere chance. To test the second hypothesis, the company's area of professional practice was cross-tabulated with the criteria adopted by the companies during tenant selection. The chi-square statistics was also computed. The result is presented in Table IX

Table 9 : Relationship between Company's core Area of Professional Practice and Criteria for Tenant Selection in Rental Housing

| Firm's area of professional practice | Criteria for Tenants' Selection | | | | | df | χ^2 | P |
	Tenant's reputation	Tenant Impact record	Tenant report	Size of the current need	Total			
PROPERTY MANAGEMENT/AGENCY	8	0	3	0	11			
GENERAL REAL ESTATE SERVICES	8	4	19	2	33	8.848	3	0.031
Total	16	4	22	2	44			

Table IX shows the relationship between Company's core area of professional practice and the criteria for tenant selection. It can be seen that the chi-square value obtained is 8.848 with p-value of 0.031. Since the p-value is less than 0.05, it can be concluded that there is a significant relationship between company's area of professional practice and the criteria for tenant selection.

To test the third hypothesis, companys' size was cross tabulated with the criteria for selecting tenant. The chi-square statistics was also computed. The result is presented in Table X

Table 10 : Relationship between Company Size and Criteria for Tenants' Selection in Rental Housing

SIZE	Criteria for tenant's selection					df	χ^2	P
	Tenant's Reputation	Tenant Impact Record	Tenant Report	Size of the current Need	Total			
1-5	17	2	14	1	34			
6-10	3	2	1	1	7			
11-15	1	0	0	0	1	12	9.937	0.621
16-20	0	0	1	0	1			
ABOVE 20	1	0	0	0	1			
Total	22	4	16	2	44			

Table X shows that the chi-square value obtained is 9.937 at p = 0.621. Since the p-value is greater than 0.05, the hypothesis cannot be rejected but accepted. It can therefore be concluded that there is no significant relationship between company size and criteria for tenants' selection.

VII. Summary of Findings

This study examined the relationship between three major profiles of real estate companies' and tenant selection criteria adopted in selecting tenant to fill their vacancies in Ibadan private rental market. It commenced with the investigation on the criteria adopted for selecting tenants, followed by determining if there is significant relationship between the companies'' profiles and the selection criteria.

In this study, it is found that the property managers (agents) base their tenancy selection in residential leases on four major criteria – tenant's personalities report, tenant's impact record, tenancy report and size of the current need. When the responses were subjected to hierarchical cluster analysis to determine the relative freqeuency of the respondents prevalent considerations in tenant selection in residential leases, tenant reputation ranks first.In commercial leases, It is found that the property managers (agents) base their tenancy selection in commercial leases on three major criteria – proposal , tenant's affordability and tenant's reputation. Also, the responses were subjected to hierarchical cluster analysis to determine the relative frequency of the agents prevalent considerations in tenant selection in commercial leases and ranked proposal consideration top of others.

It is further revealed that while there is no significant relationship between years of experience in property management,companys' size and the criteria for tenant selection, such that any relationship observed can only be attributed to sampling error or mere chance, there is a significant relationship between companys' core area of professional practice and the criteria for tenant selection. It can therefore be concluded that attributes of real estate companies cannot be wholly attached to the irregularities that emanate in Nigeria rental market, since Ibadan represents a single largest city in sub-Saharan Africa.

VIII. Recommendation

The findings from the study suggest that a uniform criteria for selecting tenant to fill private rental properties can help to monitor the quality of prospective tenants seeking accommodation. The selection should not be only based on one criteria such as rental affordability but in conjunction with others. Each of the criteria cannot stand in isolation. The assessment and emphasis on all the criteria can help to block any loophole. Yet on the formulation of effective tenancy law that outlines the modality of rental market operation is necessary in the emerging property market.

There is also a need for extension of ethics and code of practice on the profiles of real estate company in order to match the attributes with professional duties performed. Further research is recommended to investigate the effect of the criteria adopted by the practicing property managers on the performance of rental market in the emerging market.

Finally, it is not an out-of-context of this study to posit that the proliferation of quack (non-professional agents) operate in Nigeria rental market is a major barrier to the goals of a sanitized rental market in Nigeria. Hence, the need for legal intervention in order to correct the already dented image of the profession in the area of property management/agency practice in the metropolis.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Akeju, A.A. (2007), Challenges to Providing Affordable Housing in Nigeria. A Paper Presented at the 2nd Emerging Urban Africa International Conference on Housing Finance in Nigeria, Held at Sehu Yar'adua Center Abuja, October 17-19, 2007.
2. Ball, M. (2010), "The UK Private Rental Factor as a Source of Affordable Accommodation" *JRF Programme Paper*: Housing Market Taskforce. Joseph Rowntree Foundation.
3. Bello, M.O. (2008), "Tenants Performance or Housing Discrimination: Evidence from a Nigeria Real Estate Market", *Journal of the Nigerian Institute of Estate Surveyors and Valuers 31 (1)*.
4. Brzowski, C. (2008), "Managing Tenants Part Three: Written Criteria for Tenant Selection" February 9, 2008: In the Bigger Pockets
5. Carter, R. (1980), "Lone Parents and the Private Rental Market". *The Australian Quarterly,* Vol. 52. No. 1. Pp. 104-117. Australian Institute of Policy and Science. Assessed 17/02/2013.
6. Federation of Canadian Municipalities (2008). Sustaining the Momentum: Recommendations for
7. a National Action Plan on Housing and Homelessness. Ottawa, Ontario. Retrieved 26 March2008:http://www.gvrd.bc.ca/sustainability/summit/HousingFCMNationalHousingStrategy.pdf.
8. Field, A. (2005), Discovering Statistics Using SPSS, 2nd ed., Sage, Book Review, London
9. Garson, G. (2012), Factor Analysis, 2012 Edition. Blue Book Series, Statistical Associates
10. Publishing, North Carolina State University, School of Public and International Affairs, Raleigh, NC.
11. Gbadegesin, J.T. and Ojo, O. (2012), "Menace of recalcitrant tenants in metropolitan Ibadan
12. area's residential property market, Nigeria", *Property Management,* Vol. 30 Iss: 1, pp.65 – 85
13. Gbadegesin,J.T. Ojo,J.T. (2013), "Ethnic bias in tenant selection in metropolitan Ibadan private
14. rental housing market", *Property Management*, Vol. 31 Iss: 2, pp.159 - 178
15. Joint Center for Housing Studies of Harvard University, (JCHSHU) (2008), *America's Rental Housing. The Key to a Balanced National Policy.* Graduate School of Design. Harvard.
16. Kaiser, H.F. (1974), "An index of factorial simplicity", Psychometrika, Vol. 39 No. 1, pp. 31-6.
17. MacCashin, A. (2000), The private rental sector in the 21st Century-Policy Choices. A Joint
18. Publication between Threshold and St Pancras Housing Association, Trinity College, Dublin.
19. Mousseau, H. (2008), Housing Policy Trends and Implications for BC's Non-Profit Housing
20. Sector. B C N o n - P r o f i t H o u s i n g A s s o c i a t i o n. 303-3860 East Hasting, Vancouver, BC v5k 2a9
21. Nigerian Institute of Social and Economic Research (NISER),(1997), NISER Survey of Quality of Life of Nigerians: A Publication of NISER Annual Monitoring Research Project(NAMRP).
22. Ojo, B. (2003), "Management and Maintenance of Multi-Tenanted Properties in a Depressed Economy: A Case Study of Okunola Shipping Complex, Osogbo, Osun State. Thesis submitted for Election into Corporate Membership of the Nigerian Institution of Estate Surveyors and Valuers.
23. Oni, A.O. (2010), "Harnessing Real Estate Investment through Decision Process for Selecting Tenants in Nigeria". *Paper presented at the 10th African Real Estate Society Conference Organized by the African Real Estate Society held at Naivasha,* Kenya, 26th – 29th October.
24. Oni, A.O. (2011), "Harnessing Real Estate Investment through Proper Tenant Selection in Nigeria. *Property Management, V*ol. 29. ISS: 4 Pp. 383-397.
25. Pomeroy, S. (2004), Leaks in the Roof, Cracks in the Floor: Identifying Gaps in Canada's
26. Housing System. Discussion Paper prepared for the Canadian Housing and Renewal Association National Symposium, Building Housing: Building the Nation
27. Saaty, T.L. (1991), "Response to Holder's Comments on the Analytic Hierarchy Process. The *Journal of the Operational Research Society, 42, 10, Pp. 909-914.*
28. Sweet, M.L. (1959), "Tenant – Selection Policies of Regional Shopping Centers" *Journal of*
29. *Marketing.* Vol. 23, No. 4. Pp. 399-404. American Marketing Association. Accessed 20/02/2013.

DEPARTMENT OF ESTATE MANAGEMENT

QUESTIONNAIRES: This questionnaire is designed to collect information on the subjects of Tenant selection Criteria and Real Estate Company Pquestionnaire is strictly anonymous, and the information supplied is of great importance. Thanks. Gbadegesin and Oyewole.

SECTION A: Profiles/ Demographics:

1. Gender Status: (a) Male (b) Female
2. Academic Qualification:
3. (a)National Diploma (b) HND (c) Bachelor degree (d) Master degree (e) other

4. Professional Qualification:
   (a) ANIVS (b) FNIVS (c) RICS (d) FRICS (e) others (please specify)………..
5. Year of Property Management Experience:
   (a) Between 1-5 years (b) between 6-10 years (c) between 11-15 years
6. (d) Between 16-20years (e) above 20 years
7. (5.) Firm's area of professional practice (scope) (a) Property valuation (b) property management/agency (c) property development (d) general real estate services
8. Years of establishment of the firm at Ibadan: (a) Between 1-5 (b) between 6-10 (c) between 11-15

9. (d) Between 16-20 (e) above 20 years
10. Size of the firm in term of staff strength: (a) btw 1-5 (b) 6-10 (c) 11-15 (d) 16-20 (e) above 20
11. Firm Status: (a) Headquarter (b) Branch (c.) Others (please specify)
12. Location: (a) CBD (b) Along Major Road (c.) Others (please specify)

SECTION B: Nature o Tenant Selection Criteria:

Indicate the level of importance of the following criteria for selecting tenants to fill vacancies in both commercial and residential leases: Extremely important (5), Very important (4), Just important (3), Less important (2), Not important (1)

Appendix: Tenant Assessment Checklists

	Criteria for tenant selection in residential leases	1	2	3	4	5
10	Matching family size to the apartment size					
11	Tenancy trends of the prospective tenants					
12	Current occupancy and needs of the prospective tenants					
13	Current Tenancy Report of the space consumers					
14	Community Impact Record of the accommodation applicant					
15	Potential value of the usage to the building					
16	Financial soundness/ income of the tenant					
17	Reason for the new accommodation					
18	Criminality History/ Track Record of the tenants					
19	Compatibility with Neighbor					
20	Police Report of the prospective tenants					
21	Quality of the reference/ guarantorship of the tenants					

	Criteria for tenant selection in commercial leases	1	2	3	4	5
22	Economic benefit of use					
23	Potential value of the use to the properties					
24	Financial soundness/ income of the tenant					
25	Proposed or planned use					
26	Paying History of the consumer					
27	Police Report of the prospective space consumer					
28	Quality of the reference/ guarantorship of the prospective consumer					
29	Actual need of consumers					

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Affective Commitment : An Empirical Study of Executive and Non-executive Bank Employees

By Dr. Riyaz Ahmad Rainayee & Shabnam Zaffar

University of Kashmir, India

Abstract- Loyalty to a social unit", has been a concern of managers in many countries.The objective of this study is to gauge the level of affective commitment among executive and non-executive bank employees, and to study if, there is significant difference in their affective commitment to their banks. The focus resides on the loyalty, identity, membership and involvement of the employee with their bank. The results of the study unfold that the executives possess the high level affective commitmentthan non –executives and t –test reveals thatthere is statistically significant difference between these two groups.

Keywords: organisational commitment, affective commitment, normative commitment and continuance commitment.

GJMBR-G Classification : JEL Code: E29

AFFECTIVECOMMITMENTANEMPIRICALSTUDYOFEXECUTIVEANDNONEXECUTIVEBANKEMPLOYEES

Strictly as per the compliance and regulations of:

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Keywords: organisational commitment, affective commitment, normative commitment and continuance commitment.

I. Introduction

Employees who are committed to their organisations are happy to be its members, believe in and feel good for the organisation. Employees with high organisational commitment level goes beyond the normal requirement of the job, such as helping co-workers with job related problems, tolerating temporary impositions without complaint and cooperating in times of crises. Research suggests that employees who exhibit organisational commitment are happier at their work, spend less time away from their jobs and are less likely to leave their organisation. Therefore, concern for the organisation is an important aspect for judging organisational commitment level of employees (George and Jones, 2002).

Organisational commitment is job related attitude which is of considerable significance to the organisation and varies across countries. One study of workers in Saudi Arabia found that Asians working there were more committed to the organisation than were westerners and Arab Workers(Al-Meer, 1989). Another study revealed that American workers displayed higher affective commitment than did Korean and Japanese workers (Nelson, 2003).

High committed employees show emotional attachment and loyalty to the organisation and get actively involved, are pivotal variables without which the inanimate assets are worthless, identify goals and values of the organisation and display greater organisational citizenship behaviours and reduced absenteeism and turnover (Jamieson et al.1996: Watson & Papamacros,2002). Rousseau (1997) argued that there is reason to believe that the concept of

commitment may be less important to employees and employees today than it once was. The unwritten loyalty contract that existed 30 years ago between employees and employers has been seriously damaged, and the notion of employees staying with a single organisation for most of their career has become increasingly irrelevant.

Allen and Mayer (1990) differentiated organisation commitment into three components: affective commitment, normative commitment and continuance commitment. Affective commitment refers to employees' perception of their emotional attachments to their organisations and their goals. Employees with high affective commitment to organisations have strong motivation to contribute to the organisation goals because they see them as theirs. Continuance Commitment represents cognitive attachment between employees and their organisations because of the costs associated with leaving the organisation. It is based on the assumption that individuals do not leave an organisation if they would lose their benefits, take a pay cut, incur job search expenses and risk of being unemployed. Finally, normative commitment refers to typical feeling of obligation to remain with an organisation.

In general, affective commitment seems more strongly related to organisational outcomes than the other two commitment dimensions (Dunham, et al., 1994). A review of 27 studies suggested that the relation between commitment and performance is strongest for the new employees, and is considerably weaker for more experienced employees, (Wright and Bonett, 2002).

Affective commitment is defined as the employee's positive emotional attachment to the organisation. An employee who is affectively committed to the organisation desires to remain a part of the organisation. This employee commits to the organisation because he /she want to. This commitment can be influenced by many different demographic characteristics: age, tenure, sex, and education,but theses influences are neither strong nor consistent. The problem with these characteristics is that while they can be seen, they cannot be clearly defined. Positive relationships between tenure and commitment may be designation related differences in job status (Allen and Meyer, 2006).Therefore, this research study takes the steps to full fill the research gap by comparing the

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affective commitment level of executives and non-executives in banking sector employees in Kashmir Valley.

II. Objective

1. To measure affective commitment level of executive and non-executives in banks.
2. To compare the level of affective commitment between executive and non-executives in banks.
3. To suggest, on the basis of the study results, measures aimed at improving affectivecommitment among bank employees.

III. Hypothesis

Affective commitments of executives and non-executives bank employees vary significantly.

IV. Methodology

The universe for this study has been the 417 bank employees of four banks (JKB, SBI, and PNB & HDFC) of Kashmir Valley. Data we collected through random sampling procedure. Affective commitment questionnaire developed by Allen and Meyer (1986)) with modifications was used for the purpose of collecting data from the respondents. The affective commitment was measured on a 5-point satisfaction-dissatisfaction scale. The tools of analysis include mean, standard deviation &t-test.

V. Results and Discussion

The present study is aimed at examining the level of affective commitment of executives and non-executives of banking sector in Kashmir Valley. The data obtained on the measures of affective commitment is presented in Table 1.1 and 1.2, based on six items of

affective commitment scale developed by Allen and Meyer (1896). An analysis of overall mean scores across all the items in Table 1.1 reveals that employees of banking sector express positive views. The ratings with respect to the most of the items are skewed positively of the scale. The perceptions have been scored on a 5-point scale.

Table 1 : Affective Commitment

STATEMENTS	N	M	SD
be very happy to spend the res...reer with this organization	417	3.92	1.22
discussing my organization with...e outside it	417	3.97	1.11
feel as if this organization's prob...y own.	417	4.12	1.12
t feel 'emotionally attached' to th...zation(R).	417	1.72	0.81
organization has great deal of pers...ng for me.	417	3.82	1.190
t feel a strong sense of belongin...ganization.(R)	417	3.54	1.190

Table 1.2 below offers a relative profile of affective commitment of employees on the basis of their designation i.e., executives and non-executives. An average composite mean score of 3.68 and 3.35 respectively for executives and non-executives clearly indicates that executives exhibit higher affective commitment than non- executives. The results of T-test reveals that the mean difference exist (p<.05).

Table 2 : Designation wise comparison of affective commitment

Statements	Executives		Non-executives			
		SD		SD		p
be very happy to spend the rest of my career with this organiza...	4.27	.97	3.58	1.34	6.001	<0.05
discussing my organization with people outside it	4.14	1.06	3.81	1.13	3.020	<0.05
feel as if this organization's problems are my own.	4.39	.96	3.86	1.19	4.971	<0.05
t feel 'emotionally attached' to this organization (R).	1.56	.65	1.88	.99	-4.02	<0.05
organization has great deal of personal meaning for me.	4.07	1.14	3.58	1.19	-4.02	<0.05
t feel a strong sense of belonging to my organization.(R)	3.69	1.47	3.38	1.33	4.33	<0.05
osite affective commitment score	3.68	0.62	3.35	0.59	5.731	0.000

VI. CONCLUSION

The banking industry plays the role as a financial supplier to enterprises in the entire economy. And under the impacts of global capital flows as well as the rising demand of consumers for service quality, the banking industry has transformed itself from a "golden bowl" industry to service industry. Therefore, whether human capital can work to effectuate organisational performance in reaction to changes in the entire economic environment is potentially the greatest challenge for an organisation and its members (Ming et al., 2011). Therefore it is assumed that selecting employee who have high level of affective commitment may have a positive impact on the extent to which an organisation succeeds in retaining its most critical asset i.e., workforce. Based on the results of the study, it is possible to state that the employees who have high designation are having affective commitment for his bank as compare to non-executives.

Despite the merits of this study, there are limitations that must be addressed. Because of our limited sample size, it may be hard to generalise the results of the study. Although the employees sampled in our study were similar in many respects, there must be some important differences in terms of their motivational bases.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Al-Meer, A.R (1989), "Organisational Commitment: A Comparison of Westerner's, Asian's and Saudi's". International studies of Management and Organisation, vol. 19(2): pp. 74-84.
2. Allen, N. J. and Meyer, J.P. (1990). "The Measurement and Antecedents of Affective Continuance and Normative Commitment to the Organisation." Journal of occupational and Organisational Psychology, 63.1, pp.18-38.
3. Allen, N. J. and Meyer, J.P.(2006). "A three-component Conceptualization of Organisational Commitment: Some methodological considerations". Human Resource Review, 1, pp.61-98.
4. D.M. Rousseau (1997), "Organisational Behaviour in the New Organisational Era," Annual Review of Psychology, Vol. 48 (Palo Alto, CA: Annual Review, P.523.
5. Dunham, R.B., Grube, J.A., Castaneda, M. B. (1994). "Organisational Commitment: The Utility of an integrative definition. Journal of Applied Psychology, 79(3): pp. 370-380
6. George and Jones, J.M., (2002). Understanding and Managing Organisational Behaviour. New Jersey: Prentice Hall
7. Jameison, D. & Richards T (1996). Commitment in the Workplace; Theory, Research & application. Newburg Park A: Sage
8. Nelson, L. and, Cooper, C. (2007). Positive Organisational Behaviour. Washington DC, Sage Publications.
9. Ming –Ten, Hung – Lin Tsai and Yi – Chou Wang. (2011). "A Study on the relationship between leadership Style, emotional intelligence, self-efficacy and organisational commitment: A case study of the banking Industry in Taiwan". African Journal of Business Management Vol. 5 (13), pp.5319-5329.
10. O' Reily, C.A., & Chatman, J. (1986). "Organisational Commitment and Psychological Attachment: The effects of Compliance, Identification, and Internalisation on Pro-social Behaviour". Journal of Applied Psychology, Vol.71, 492-499
11. Watson, G. &, Papmacrcos, S (2002). Value Reframing & Enactment: Coping with Cognitive challenge. Presented at the International Conference of the Global Business & Technology Association, Rome.
12. Wright and Bonet (2002). "The Moderating Effects of Employees Tenure on the Relation between Organisational Commitment and Job Performance: A meta-analysis". Journal of Applied Psychology, pp. 1183-1190.

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The Effects of Financial Liberalization on Stock Market Cycles: Structural Time Series Models

By Afef Trabelsi Mnif

High School of Commerce in SFAX, Tunisia

Abstract- We compare the behaviour of stock market cycles during repression, in the aftermath of financial liberalization,and in the short and long run following liberalization. We investigate the characteristics of stock market cycles ina group of Latin American (Argentina, Brazil and Chile) and Asian countries (Philippines, Korea, Taiwan andThailand) during 1975–2005. This paper aims to apply the methodology of univariate structural unobservedcomponents time series models. Our results indicate that liberalization triggers more volatile stock market in theshort run. Still, liberalization seems to generate more stable financial markets in the long run. Stock marketcycles of Asian countries continue to be very high in the post-reform period, mostly because of the influence ofthe Asian crisis. However, after financial liberalization, Latin American stock market leads to more stable stockmarket cycles.

Keywords: business cycle, emerging stock market, financial liberalization, structural unobserved components.

GJMBR-G Classification : JEL Code:C22, D53, E32, G15

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Keywords: business cycle, emerging stock market, financial liberalization, structural unobserved components.

Jel Codes: C22, D53, E32, G15.

I. Introduction

During the late 1980s and early 1990s several Latin America and Asian economies went through a number of economic reforms and financial liberalization. However, these processes have been tempered by financial crisis.

The crisis illustrates possible risks of financial liberalization.

There are two contrasting views of financial liberalization. In one view, financial liberalization strengthensfinancial development and contributes to higher long-run growth. In another view, liberalization inducesexcessive risk-taking, increases macroeconomic volatility and leads to more frequent crisis.

The effect of financial liberalization on growth and its impact on financial fragility and the propensity to crisis have been largely studied in separate strands of the empirical literature. The financial crisis literature tests whether financial liberalization increases the risk of financial crisis. Kaminsky and Reinhart (1998), Detragiache and Demirguc-Kunt (1998), Rodrik (1998, 2000), Soros (2002), Stiglitz (2002) and Glick and Hutchinson (2001) find that the propensity to crises increases in the aftermath of financial liberalization.

In contrast, the literature on liberalization claimed that financial liberalization helps to improve the functioning of financial systems and allowing cross-country risk diversification. For example, Obstfeld (1998), Stulz (1999) and Mishkin (2003) claim that financial liberalization promotes transparency and accountability, reducing adverse selection and moral hazard while in financial markets.

The empirical research, so far, has not helped to resolve the conflicting views. In fact, the various lines of empirical research focus either on the short-run or the long-run effects of liberalization, without studying the possible time-varying effects of financial liberalization.

Studies analyzing the behaviour of stock prices have been undertaken in the recent years. It was confirmed in the study that owing to liberalization the stock markets tend to become more stable. Examples of analyses of emerging market cycles are Bekaert and Harvey(1997), De Santis and Imrohoroglu (1997), Huang and Yang (1999), Kim and Singal (2000), Aggarwal and al. (1999), Kaminsky and Schmuckler (2003) and Edwards and al. (2003). Financial liberalization cause financial extremes in the short-run and also brings a change in the institutional set up of which will have a supporting and better functioning of financial markets.

In this paper we focus on analyzing whether the dynamic behaviour of stock market cycles has changed significantly over the period 1975-2005 for seven emerging countries. The choices of countries and period make the analysis especially relevant. Our sample period corresponds to years of profound development of both the financial and the productive sides in these emerging countries, but also to the years of the major financial crises.

The emerging stock markets analyzed in this paper represent a highly diverse sample. During the period under consideration they had different regulations regarding international capital mobility, different domestic supervisory systems and different exchange rate regimes. Moreover, all of them, with the exception of Chile, faced serious crises during the last few years. This diverse data set, then, allows us to investigate the behavior of business cycle market under different institutional settings and under different external environments. We are particularly interested in addressing the following questions:

Has stock market cycles characteristics been different across these countries? Has it changed through time?

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What are the effects of financial liberalization on the behaviour stock market cycles? Has it changed through time?

The structure of the paper is as follows. In section 2 we present briefly reviews some of the previous contributions on the relationship between financial liberalization and behaviour of stock market. In Section 3 we present he data and the methodology used to identify the characteristic of stock markets cycles. In Section 4, we present univariate unobserved components structural time series models.

In section 5, we provide a discussion of the results in the context of our analysis. Finally, in section 6 we offer some concluding remarks.

II. Literature Review

During the last decades, many emerging countries have liberalized their financial systems. This financial liberalization has been linked to lending booms and crisis. However, markets may become informationally more efficient, behaviour of stock market reacts fully and more quickly to relevant information; also, increased volumes of speculative capital may induce excess volatility. After liberalization, the gradual development and diversification of the markets could lead to lower volatility and to a lower sensitivity to new information.

We briefly review this literature below to show the effects of financial liberalization on stock market cycles.

Studies analyzing the behaviour of stock prices over financial cycles have been are mixed. Bekaert and Harvey (1997) generally find that volatility decreases after liberalization. De Santis and Imrohoroglu (1997) also find evidence that volatility decreased after liberalization in a subset of countries, such as Argentina. However, Huang and Yang (1999), using the dates of financial liberalization from De Santis and Imrohoroglu (1997), show that the unconditional volatility of the stock markets in three of the countries analyzed (South Korea, Mexico and Turkey) increased after liberalization, whereas it decreased in another four countries (Argentina, Chile, Malaysia and the Philippines).

Aggarwal et al. (1999) find that most events around the time period when shifts in volatility occur are local but that liberalization processes seem not to have induced the changes in variance. Also, they find both increases and decreases in volatility depending on the country and on the sequence of events. Bekaert and al. (2006), find that volatility of stock market cycles seems to decrease after liberalization. Time varying patterns of financial cycles before and after financial liberalization was examined by Kaminsky and Schumkler (2001, 2002, 2003) in 28 countries using non parametric methodology (turning point detection). The results indicate that more liberalization cause financial extremes in the short-run and also brings a change in the institutional set up of which will have a supporting and better functioning of financial markets. In a study done by Edwards et al (2003), the stock price behaviour in six emerging economies is analyzed. The results they find that volatility after financial liberalization has increased in Asian countries but not in Latin American countries.

III. Description of Data and Methodologies

In this paper we analyze stock market cycles in a group of Latin American (Argentina, Brazil and Chile) and Asian countries (Philippines, Korea, Taiwan and Thailand). We investigate the characteristics of stock market cycles during 1975–2005. We make a distinction between the pre and post-financial reform periods, and we concentrate on the following characteristics of stock market cycles: Duration, amplitude and volatility. The data are taken from the S&P /IFCG1 (S&P/IFC monthly Global Index) (Standad and Poor / Global International Finance Corporation), which gives monthly series from 1975 to 2005.

In order to carry out our estimations, we used the application STAMP 7.0 (Structural Time Series Analyser, Modeller and Predictor, 2006) that has been designed especially to deal with unobserved components models (Koopman, Harvey, Doornik and Shephard, 2000).

The post financial reform is devised on two periods: short effect and long effect of financial liberalization.

Short run effect: include the four years after the date of liberalization.

Long run effect: include the fifth year after the date of liberalization.

The year thereafter, conditional on the deregulation is not being reserved.

The dates of liberalization (table1) are find by G. L. Kaminsky and S. Schmukler (2003)2. Most of studies focuson the elimination of controls on just one particular financial sector, be it the capital account, the domestic financial sector and the stock market. Kaminsky and Schmukler find a chronology deals with the regulations in three sectors.

Table 1 : The dates of financial liberalization

Asian countries		Latin American countries	
Philippines	01/94	Argentina	01 /90
Korea	01/96	Brazil	03/95
Taiwan	01/97	Chile	01/92
Thailand	01/98		

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1 S&P/IFC global index present the performance of the global activity of the stock market for each country.

2 G. L. Kaminsky and S. Schmukler (2003): « short- run pain, long-run gain: The effects of financial liberalization», IMF Working Paper No WP/03/34; February 2003.

3 In order to carry out our estimations, we used the application STAMP 7.0 (Structural Time Series Analyser, Modeller and Predictor) that has been designed especially to deal with unobserved components models (Koopman, Harvey, Doornik and Shephard, 2000).

IV. Univariate Models: stochastic Trends and Cycles

This paper stands on results given by univariate unobserved components structural time series models3 proposed by the statistician Andrew Harvey (Harvey, 1989; Koopman and Harvey, 1997). The structural time series model splits every series into trend, cycles, and irregular components.

$$y_t = T_t + C_t + e_t \; ; \; t = 1,..., H \tag{1}$$

Where y_t is the logarithm of a series. T_t, C_t and ε_t are respectively the trend, cyclical and irregular components.

The model can include several cyclical components associated to different frequencies.

4.1. Stochastic trends

The trend is a local linear one for which both the level and the slope are random walks specified as follows:

$$T_t = T_{t-1} + \beta_{t-1} + \eta_t \tag{2}$$

$$\beta_t = \beta_{t-1} + \zeta_t \tag{3}$$

η_t and ζ_t are orthogonal white noises with variances σ_η^2 and σ_ζ^2 respectively. The noise allows the level of the trend to fluctuate while ζ_t tilts the slope.

In the general case, it is clear that the trend defined by the equations is an ARIMA (0, 2, 1). But particular cases are interesting:
– In the extreme case wheres $\sigma_\eta^2 = \sigma_\zeta^2 = 0$ the trend is simply a deterministic one.
– If only $\sigma_\zeta^2 = 0$, the slope is constant in time and the trend becomes a random walk with drift.
– If only $\sigma_\eta^2 = 0$, Slowly Moving Smooth Trend, the trend is still integrated of order two as in the general case but without white noise affecting its level.

4.2. Stochastic cycles

In recursive form the cycle component can be expressed as:

$$\begin{bmatrix} C_t \\ C_t^* \end{bmatrix} = \rho \begin{bmatrix} \cos \lambda & \sin \lambda \\ -\sin \lambda & \cos \lambda \end{bmatrix} \begin{bmatrix} C_{t-1} \\ C_{t-1}^* \end{bmatrix} + \begin{bmatrix} \kappa_t \\ \kappa_t^* \end{bmatrix} \tag{4}$$

C_t^* is a technical variable needed to write the cycle in recursive form.

The disturbances κ_t and κ_t^* are two orthogonal white noises with identical variance σ_κ^2. The damping factor of the cycle is given by ρ, $(0 < \rho < 1)$ and its frequency is $\lambda \in [0, \pi]$, which corresponds to a period equal to $2\pi/\lambda$.

The disturbances make the cycle stochastic and able to take into account the complexity of the apparent cyclical movement, which usually presents asymmetry and angular turning points. If we cancel the disturbances in equation, the cycle becomes deterministic. One can verify that the cycle is a stationary ARMA (2, 1) process when the coefficient ρ is strictly inferior to one. There is equivalence between the statistic property of stationarity and the damping of the cycle.

V. Estimation Results

The method of estimation used is maximum likelihood applied to the state-space form of the model, which is decomposed into observation and state equations. The extraction of the unobserved components uses the Kalman filter. This filter produces a recursive estimation of the state vector for the date t, conditioned by the information available until t-1: it is the filtering step. A set of diagnoses is available in order to assess the empirical fitness of the model. The basic indicators are the volatility and amplitude of the cycle. Three other specific diagnoses will be always considered:

– Normality Bowman-Shenton statistic NBS or Doornik-Hansen NDH (more adapted to small samples) based on third and fourth moments of the residuals and having a χ^2 distribution with 2 degrees of freedom if the model is correctly specified. The normality test permits the detection of particular observations badly explained by the model.
– Serial correlation Box-Ljung statistic Q (p,q) based on the first p residual autocorrelations, tested against a χ^2
– with q degrees of freedom, where q is equal to p-n+1 and n is the number of hyperparameters.
– Relative determination coefficient RD 2. These diagnoses have been complementarily used to select the models, without being always completely satisfactory.

a) Trend-Cycle Split of Asian Countries

The table 2 shows the characteristics of stock market cycles in Asian countries (Philippines, Korea, Taiwan and Thailand) during 1975–2005. We classify financial cycles in two categories, those that occur during repression times and those that occur after liberalization.

Table 2 : Characteristics of Asian stock market cycles in repressed and liberalized period

	Philippines		Korea		Taiwan		Thailand	
Characteristics	Repressed	Liberalized	repressed	liberalized	Repressed	Liberalized	repressed	Liberalized
Volatility	0.0017	0.0232(+)	0.0018	0.0922(+)	0.0014	0.0060(+)	0.0010	0.0057(+)
Amplitude	0.0541	0.0764 (+)	0.0564	0.1359(+)	0.0458	0.1015 (+)	0.0591	0.0925(+)
ρ (damping fact or of the cycle)	0.9777	1.0000	0.9919	0.9620	0.9821	0.9681	0.9040	0.8651
Period of the cycle (months)	14.9620	24.8691 (+)	19.4683	33.0416 (+)	15.2292	24.1301 (+)	10.8765	20.3719 (+)
Frequency	0.4199	0.2526	0.6031	0.1594	0.4125	0.2603	0.5776	0.3032

Table 2 gives the results of the univariate split of the log monthly stock prices index for the repression and liberalization period. The results indicate that if liberalization triggers more volatile stock market, stock market cycles become more pronounced after liberalization. The estimated period of the Asian cycle after liberalization is appears longer than the repression years. We remind the reader that in such a kind of models, the cycle period corresponds to a virtual length. Its realisation is determined by the effective innovations sequence that generates the cycle. Philippines have a deterministic stock market cycle after financial liberalization; damping factor of the cycle is equal to one. The stock market cycles of Korea, Taiwan and Thailand are stochastic and able to take intoaccount the complexity of the apparent cyclical movement. The evidence for the Asian countries in the sample indicates that the amplitude and volatility substantially increases in the aftermath of liberalization.

The table 3 shows the characteristics of stock market cycles in Asian countries in the post reform.

The post financial reform is devised on two periods: short effect and long effect of financial liberalization.

Short run effect: include the four years after the date of liberalization.

Long run effect: include the fifth year after the date of liberalization.

Table 3 : Characteristics of Asian stock market cycles in the post financial reform

	Philippines		Korea		Taiwan		Thailand	
Characteristics	Short run	Long Run	Short run	Long run	Short run	Long run	Short run	Long run
Volatility	0.0296(+)	0.0016(-)	0.1462(+)	0.0090(-)	0.0242(+)	0.0013(-)	0.0031 (+)	0.0008 (-)
Amplitude	0.1817(+)	0.0446(-)	0.3902(+)	0.0886 (-)	0.2172(+)	0.0488(-)	0.0747 (+)	0.0385 (-)
ρ (damping factor of the cycle)	1.0000	1.0000	0.9962 (+)	0.9511 (-)	1.0000	1.0000	0.8396	0.9783
Period of the cycle (months)	25.258	21.235	33.849	19.246	27.461	14.098	15.441	14.593
Frequency	0.2487	0.2958	0.1856	0.3264	0.2288	0.4456	0.4069	0.4305

Table 3 gives the results of the univariate split of the log monthly stock prices index for the post reform period.

We classify financial cycles in two categories, those that occur in the short run after liberalization, and those that occur in the long run following liberalization. Financial liberalization triggers more volatile stock market, stock market cycles become more pronounced in the short run. The amplitude and volatility substantially increases in the immediate aftermath of liberalization. But equity markets stabilize in the long run if liberalization persists, with the amplitude and volatility smaller than in repression times. Philippines and Taiwan have a deterministic stock market cycle after financial liberalization; damping factor of the cycle is equal to one.

b) Trend-Cycle Split of American Latin Countries
The table 4 shows the characteristics of stock market cycles in Latin American countries (Argentina, Brazil and Chile) during 1975–2005.

Table 4 : Characteristics of Latin American stock market cycles in repressed and liberalized perio

Characteristics	Argentina		Brazil		Chile	
	Repressed	liberalized	Repressed	Liberalized	Repressed	Liberalized
Volatility	0.128	0.029(-)	0.069	0.032(-)	0.018	0.008(-)
Amplitude	0.224	0.109(-)	0.222	0.0885(-)	0.099	0.078(-)
ρ	0.996	0.971	0.924	0.7276	0.828	0.801
Period of the cycle	39.927	27.530	41.622	34.327	32.994	24.254
Frequency	0.151	0.186	0.104	0.119	0.551	0.732

Table 4 gives the results of the univariate split of the log monthly stock prices index for the repression and liberalization period. The stock market cycles become less pronounced after liberalization. The estimated period of the American Latin cycles after liberalisation is appears shorter than the repression years. Argentina, Brazil and Chile are stochastic and able to take into account the complexity of the apparent cyclical movement.

The American Latin countries in the sample indicate that the amplitude and volatility substantially decreases in the aftermath of liberalization. Comparisons among Latin American countries suggest some interesting differences. The Chile cycle showed less volatility (0.008) and amplitude (0.078) than the others; together with Brazil, they were also reluctant to open the capital account completely until the last few years. Argentina experienced sharper and more frequent policy reversals than the other, and international liberalization accompanied or even led domestic liberalization. Individual Latin America countries also demonstrated differences among themselves and with East Asian. Overall, the East Asian countries were less inclined toward financial liberalization than their Latin America counterparts.

The table 5 shows the characteristics of stock market cycles in American Latin countries in the post reform.

Table 5 : Characteristics of American Latin stock market cycles in the post financial reform

Characteristics	Argentina		Brazil		Chile	
	Short run	Long run	Short run	Long run	Short run	Long run
Volatility	0.206	0.007 (-)	0.070	0.003(-)	0.038	0.005(-)
Amplitude	0.229	0.115 (-)	0.315	0.064(-)	0.206	0.0579(-)
ρ (damping factor of the cycle)	0.998	1.000	0.999	1.000	0.805	0.951
Period of the cycle (months)	27.269	23.398	33.309	19.036	25.212	22.699
Frequency	0.230	0.268	0.188	0.330	0.992	0.276

Table 5 gives the results of the univariate split of the log monthly stock prices index for the post reform period.

The stock market cycles become more pronounced in the short run. The amplitude and volatility substantially increases in the immediate aftermath of liberalization. But equity markets stabilize in the long run ifliberalization persists, with the amplitude and volatility smaller than in repression times.

VI. Conclusions

Our analysis showed that liberalization seems to generate more stable financial markets in the long run. The volatility and amplitude of the cycles have not intensified in the long run after financial liberalization. In fact, despite the claim that financial integration leads to volatile capital markets around the world, stock market cycles become less pronounced after liberalization. Still, in the short run, we found that financial liberalization does tend to trigger more volatile cycles. Stock market cycles of Asian countries continue to be very high in the postreform period, mostly because of the influence of the Asian crisis. However, after financial liberalization, Latin American stock market leads to more stable stock market cycles.

References Références Referencias

1. Aggarwal, R., Inclan, C., Leal, R., 1999. Volatility in emerging stock markets. Journal of Financial and Quantitative Analysis 34, 33-55.
2. Bekaert, G., Harvey, C.R., 1997. Emerging equity market volatility. Journal of Financial Economics 43, 29-78.
3. Bekaert, G., Harvey, C.R., 2000. Foreign speculators and emerging equity markets. Journal of Finance 55, 565-613.
4. Bekaert, G., Harvey, C.R., 2002. Research in emerging marktes finance: Looking to the future. Emerging Markets Review 3, 429-448.

5. Bekaert, G., Harvey, C.R., 2003. Emerging markets finance. Journal of Empirical Finance 10, 3-55.

6. Bekaert, G., Harvey, C.R., Lumsdaine, R.L., 2002a. Dating the integration of world equity markets. Journal of Financial Economics 65, 203-249.

7. Bekaert, G., Harvey, C.R., Lumsdaine, R.L., 2002b. The dynamics of emerging market equity flows. Journal of International Money and Finance 21, 295-350.

8. Bekaert, G., Harvey, C.R., Lundblad, C., 2006. Growth volatility and financial market liberalization. Forthcoming, Journal of International Money and Finance.

9. De Santis, G., Imrohoroglu, S., 1997. Stock returns and volatility in emerging financial markets. Journal of International Money and Finance 16, 561-579.

10. Edwards, S., Gómez Biscarri, J., Pérez de Gracia, F., 2003. Stock market cycles, financial liberalization and volatility. Journal of International Money and Finance 22, 925-955.

11. Edwards, S., Susmel, R., (2003): "Interest Rate Volatility and Contagion in Emerging Markets: Evidence from the 1990s". Review of Economics and Statistics 66, 505-532.

12.]HARVEY A. C., (1989): "Forecasting, Structural Time Series Models and the Kalman Filter", Cambridge University Press.

13. HARVEY A. C., (2000): « Testing in Unobserved Component Models », Journal of Forecasting.

14. Huang, B.N., Yang, C.Y., 1999. The impact of financial liberalization on stock price volatility in emerging markets. Journal of Comparative Economics 28, 321-339.

15. Kaldor N. (1939): "Speculation and Economic Stability", Review of Economic Studies, n° 1.

16. Kaminski G. & C. Reinhart (1996): "The Twin Crises: the Causes of Banking and Balance of Payments Problems", IMF Discussion Papers,n° 544, mars.

17. Kaminsky, G., Reinhart, C., (2002): "Financial Markets in Times of Stress". Journal of Development Economics 69, 451-470.

18. Kaminsky, Schmukler (2003): "Short- run pain, long run gain", NBER WP n°9789.

19. Kaminsky, G and S. Schmukler (2003): « short- run pain, long-run gain: The effects of financial liberalization », IMF Working Paper No WP/03/34; February 2003.

20. Kim, E.K., Singal, V., 2000. Opening up of stock markets: Lessons from emerging economies. Journal of Business 73, 25-66.

21. KOOPMAN S.J. , A.C. HARVEY, J.A. DOORNIK J.A. et N. SHEPHARD, 2000, Stamp Structural Time Series Analyser, Modeller and Predictor,Timberlake Consultants, London.

22. KOOPMAN S.J. ET A.C. HARVEY, (1997): «Trends and Cycles in Multivariate Time Series », in System Dynamics in Economic and Financial Models, C. Heij, H. Schumacher, B. Hanzon and C. Praagman (eds), John Wiley and Sons.

23. Michel Aglietta, (1998) : « Pourquoi la contagion a-t-elle eu lieu ? », Problèmes économiques n°2559, 11 Mars 1998.

24. Pagan, A.R., Sossounov, K.A. (2003): "A Simple Framework for Analyzing Bull and Bear Markets". Journal of Applied Econometrics 18,23-46.

25. Paul Krugman, (1999): « Monomoney mania » , in Slate, 15 avril 1999.

26. World Bank, (1989): "World development report 1989: Financials systems and development", New York, Oxford University Press.

Annexe

Trend-cycle split
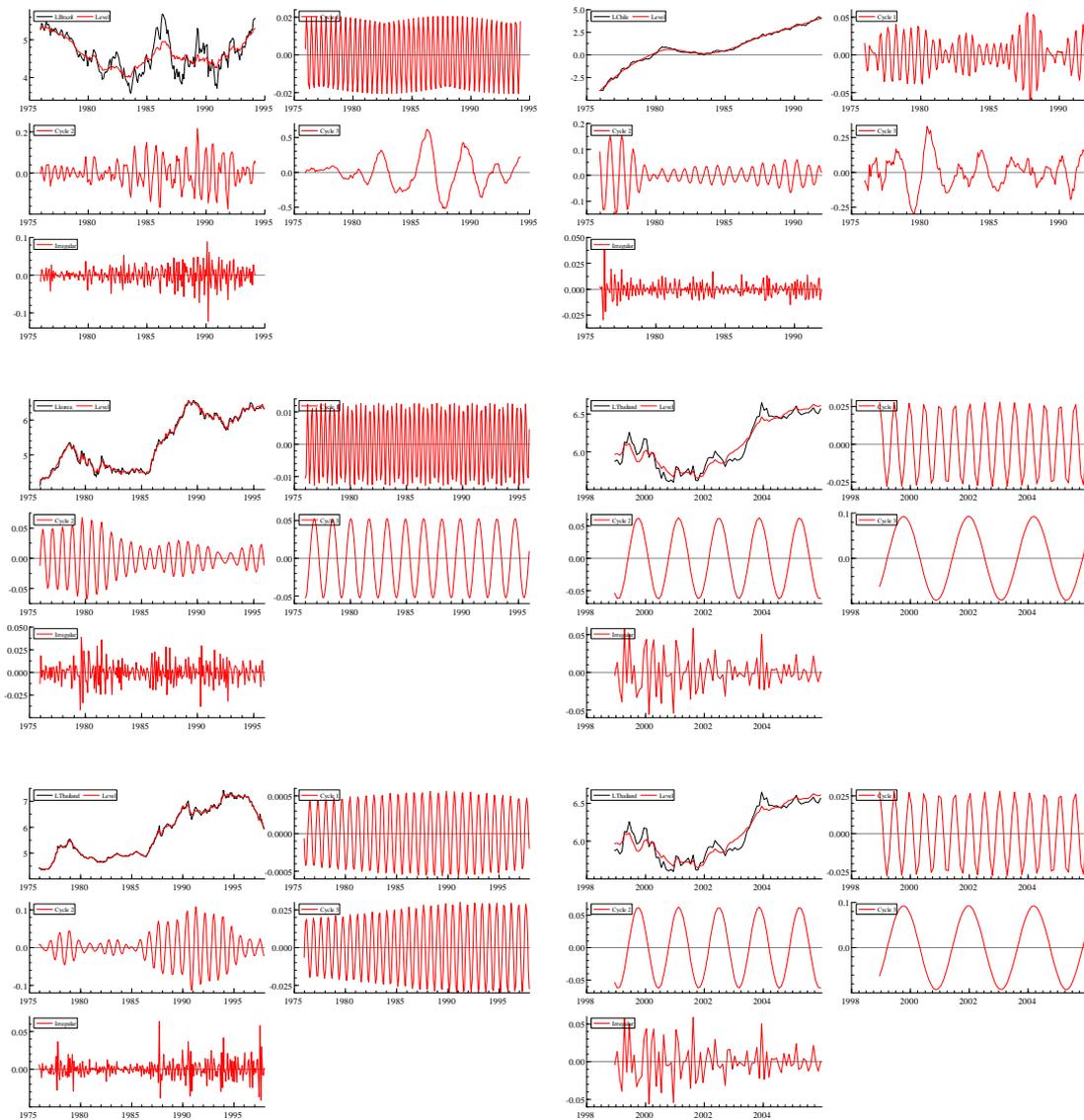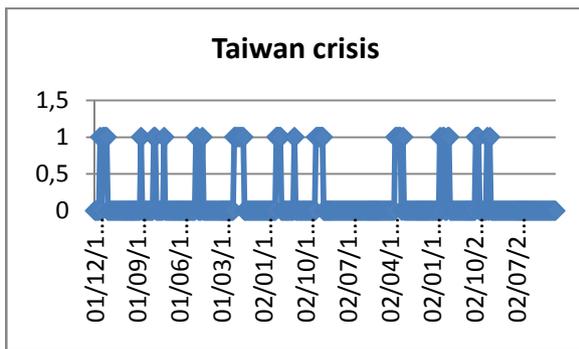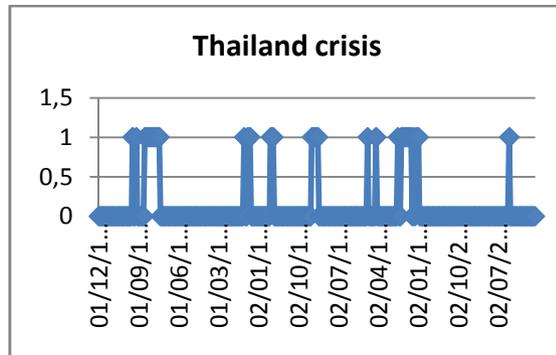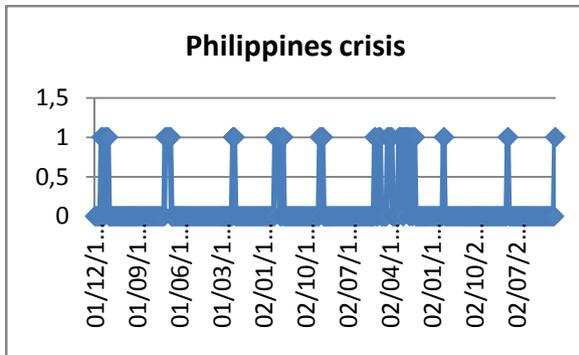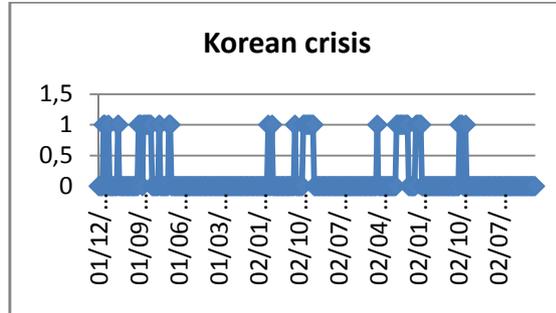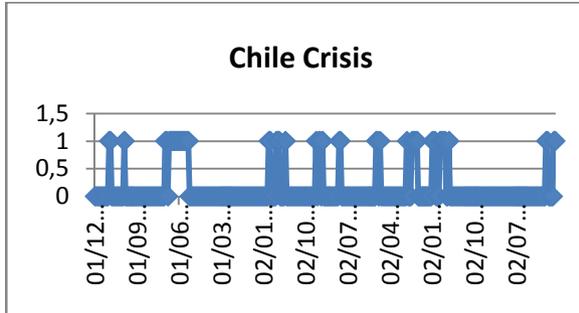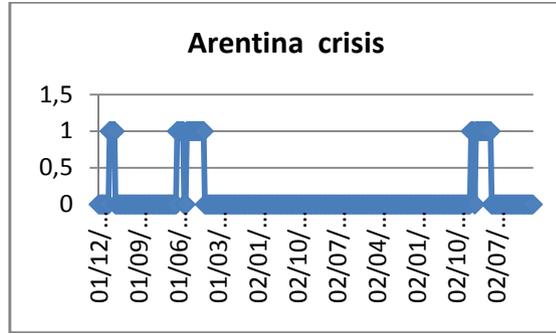
The Impact of Affective Commitment in Employees Life Satisfaction

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Abstract- A commitment refers to attachment and loyalty. An affective commitment is an employee's emotional attachment to, identification with and involvement in an organization. It influence personal characteristics, structural characteristics, and work experiences. The purpose of it is study is to analyse the role of affective commitment in employee's life satisfaction. Life satisfaction is the embodiment of a global judgment about one's life taken as a whole. It is positive evaluation of the condition of one's life, judgment. In this study sample includes 200 employees of NTPC of India from Sonbhadra District. The sample consisted of managerial employees who volunteered to participate in the study. The data has been analysing by descriptive analysis, correlation, linear regression, and ANOVA. The results were found that organizational affective commitment is highly significantly related with life satisfaction among managerial employees.

Keywords: affective commitment, life satisfaction.

GJMBR-G Classification : JEL Code: J19, E29

THEIMPACTOFAFFECTIVECOMMITMENTINEMPLOYEESLIFESATISFACTION

Strictly as per the compliance and regulations of:

The Impact of Affective Commitment in Employees Life Satisfaction

Neha Kumari [α] & Nishat Afroz [σ]

Abstract- A commitment refers to attachment and loyalty. An affective commitment is an employee's emotional attachment to, identification with and involvement in an organization. It influence personal characteristics, structural characteristics, and work experiences. The purpose of it is study is to analyse the role of affective commitment in employee's life satisfaction. Life satisfaction is the embodiment of a global judgment about one's life taken as a whole. It is positive evaluation of the condition of one's life, judgment. In this study sample includes 200 employees of NTPC of India from Sonbhadra District. The sample consisted of managerial employees who volunteered to participate in the study.The data has been analysing by descriptive analysis, correlation, linear regression, and ANOVA. The results were found that organizational affective commitment is highly significantly related with life satisfaction among managerial employees.

Keywords: affective commiment,life satisfaction.

I. Introduction

In the era of changing economic climate in many countries, especially in India, concern has been expressed about maintaining or even enhancing employee's behavior to the job and the organization. To move towards the globalization of trade since the post war period has had a dramatic effect on organization and employees. The effects of change have been felt outside the workplace also. The entire economy of the world has been altered from that of an essentially and highly industrialized economy to a globalized one, with corresponding change in overall pattern of life. These widespread changes have markedly changed human work place accompanied by significant change, in such aspect of human behavior as the political, economic, and social and culture areas. Technological development during past year, have brought about major changes in the nature and organization of human work. These type of developments and the accompanying changes in the nature of human work have been accompanied not only be certain human benefits (such as improvement in working conditions, higher income, quality of work life, commitment, creativity).

In the era of changing economic climate in many countries, especially in India concern has been expressed about maintaining or even enhancing

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employer's commitment to the job and the organization. Modway, Poter and Steers (1982) have suggested that going a greater understanding to the process related to organizational commitment has implications for employers, organizations and society as a whole. Employee's level of commitment to an organization may make them eligible to receive both extrinsic and psychological like as an innovation-supportive climate, decision making, interpersonal trust, issues related to organizational justice, such as the fairness of lay off procedures, pay raises, and promotions, reward, benefit, life satisfaction or reward associated with membership in the organization.

Sayeed (1989) has suggested there broad categories of antecedents of organizational commitment, (1) personal characteristics such as age, tenure, educational level and personality variables, etc. (2) role –related factors such as job challengers, role conflict, role ambiguity and role over load which may influence members motivation to work, and (3) structural factors as organization size, span of control, participation in decision making etc

Meyer and Allen (1997) reported that there have been various researchers analyzed the relationship between affective organizational commitment and their quality of life. These researchers also reported that the predictors of affective organizational commitment generally occurred in three categories: (a) organizational characteristics, (b) personal characteristics, and (c) work experiences. Allen et al. (1990) stated that organizational commitment is one in which commitment is considered an affective or emotional attachment to the organization such that the strongly committed individual identifies with, is involved, and enjoys membership in the organization. Lee & Mowday (2007) argued that employees who have high levels of organizational identification have enhanced feelings of belongingness to their organization and are more psychologically attached to it. Affective commitment tend to correlate more strongly with any given outcome variable including the focal behavior (Meyer et al. 2001). Mayhew & M.dan Gardner, (2007) stated that organizational-based psychological ownership is concerned with individual members' feeling of possession and psychological connection to an organization as a whole including organizational culture and climate, attitudes of senior management, corporate

goals and vision, reputation of the organization, and corporate policies and procedures.

Affective organizational commitment is one dimension of a multi-commitment work environment. Explaining what it is that contributes to affective organizational commitment in different outcomes like quality of work life variables involving satisfaction with relations, hobbies, place of residence, satisfying life, health condition, physical fitness etc. When family researchers examine the interplay between work and the family, they usually focus on the impact of people's work situations on their family lives. But recent research acknowledges that non-work aspects, such as life satisfaction, should be important consideration for organization operating system.

There is a lack of congruence regarding the definition of life satisfaction, while some researchers focus on a global assessment (e.g.Judge; Watanable 1993; Judge et al.1998) other researchers concentrated on the various facets of life satisfaction (e.g. Anbdrews & Withey, 1976; Campbell, Converse & Rogers 1996), Diner (1984) notes that satisfaction with specific domains of life is consistently used in the subjective well being literature, where domains that are closest to individuals personal lives are the strongest indicators of life satisfaction. Life satisfaction is satisfaction experienced through having a good job and a good family life (Sekaran 1993). Life satisfaction is a construct that is central to the sub discipline of subjective well being (e.g. Andrews & Withey, 1976; Diner 1984). The cognitive component is associated with life satisfaction and satisfaction with various life domains (Pavot & Diener, 1993).

Consistent with, previous research (Campbell et. al., 1976) life satisfaction was operationalized as the employee's satisfaction with different life domains including place of residence, leisure activities such as hobbies, family life, and friendship and health conditions. Although many domains can be listed at a global level it is possible to distinguish between the work and non-work domains of people's lives (Near, Smith, Rice, & Hunt, 1993). With each domain, a person's level of satisfaction results from the experience of positive and negative events (Hart, 1994; Headey & Wearing, 1989).

Life satisfaction is typically defined as the degree to which individuals judge the quality of their lives favorably and it can be equated with happiness (Veenhoven, 1991). Researchers often consider life satisfaction, happiness and positive and negative affect as comprising the same construct labeled subjective wellbeing (Diener, 1984). Some existing evidence suggested that life satisfaction is partly a function of genetic characteristics or early childhood experiences and partly a state that can fluctuate depending on other factors present in individual's lives (e.g. quality of life, marital status and age, Veenhoven, 1991).

Life satisfaction construct includes various social indicators, working life and individual perception of satisfaction with different domains of one's life experiences, including marriage and family, health, job, neighborhood and municipality leisure; housing and financial condition (Andrews & Withey, 1976; Compbell, Converse & Rodgers, 1976). The notion of an electric model of life satisfaction attitude posted by (Near et. al. 1987) suggested that one's contentment with life is a Gestalt concept built upon satisfaction with specific life domain such as work and family experiences. Satisfaction with these diverse domains appears to result in overall satisfaction with the quality of one's life.

Judge, Budreall, and Bretz (1994) tested a hypothesized model and conclude that job satisfaction and life satisfaction were positively and reciprocally related. Male executive who were satisfied with their job were significantly more likely to be satisfied with their lives in general and vice versa. These researches suggested that cognitive depend on affective state. Poras, (1987) investigated the degree to which the encoding, recall, and evaluation of job information depend on affective state. In fact some initial evidence in this regard was recently offered by Necowitz and Roznowski (1992), who found that individual in negative affective states. Similar to the way in which cognitive processing models have illuminated the performance appraisal process, a cognitive approach may also clarify the psychological processes by which life satisfaction influences job satisfaction.

Work and family represent two of the most central realms of adult life. Work family interface has produced a strong emphasis on over all well being (Burke & Greenhaus 1997; Voydaneff; 1997). Family activities contribute to life satisfaction (Near, Smith, Rice & Hunt, 1994; Veenhoven, 1991). So when work interferences with family activities, it lowers life satisfaction. When work family conflict is perceived it is the non- work domain that is impeded, therefore work family conflict should influence life satisfaction directly.

II. Literature Reviews

Life satisfaction and affective organizational commitment are related but different constructs. Commitment, as a construct, is more global than the construct, life satisfaction. Affective commitment concerns feelings about the organization district as a whole (Mowday, Steers, & Porter, 1979). Life satisfaction, on the other hand, is a construct that concerns how an employee feels about a given job or the related experiences of the job or they construct a life as a happy and optimistic outlook, positive self image, and felling success to achieving goals. (Shin & Reyes, 1991b). The researcher's purpose in this study was to explain the role of the affective organizational commitment in employee's quality of life.

Mayer Allen & Smith, 1995, proposed, "Highly committed employees are thought to be motivated to exert high levels of life on behalf of the organization". It would also allow those internal motives (e.g., feelings of accomplishment and self- fulfillment should be more highly related to emotional commitment,

Mowday et al. (1992) argued that affective commitment differs from the concept of life satisfaction in several ways: to begin with affective commitment as a construct is more global, reflecting a general affective response to the organization as a whole. Life satisfaction is an overall assessment of feelings and attitudes about one's life at a particular point in time ranging from negative to positive. Hence commitment emphasizes attachment to the employing organization, including its goals and values, while satisfaction emphasizes the specific task environment which directly affected by life satisfaction, family life and other facilities.

A survey of life satisfaction and work related attitude was conducted by Keon & McDonald (1992). This study was provided evidence that life satisfaction and affective commitment organization are jointly determined.

There is growing evidence that aspects of cognitive emotional style and related to work attitudes and quality of work life (Mayer Smith & Allen 1997). Of particular interest in previous studies is the relationship between life satisfaction and organizational affective commitment. In a number of studies reported that there would be positive highly correlation between affective commitment and life satisfaction.

The evidence for a link between organizational affective commitment and life performance is much more tenuous that for the link between turnover. Some researcher hypothesis that the weaker relationship is due to the interference of other factor (Mathieu & Zajac, 1990). Steers (1997) suggested that affective commitment can explain the motivation and intention of employees emotions to perform well, but cannot always counteract other restrictions such as the ability of the employees, actual and perceived by an individual,

loneliness, helplessness, leisure time activities and social support network derived from the environment (Lio et al. 1990).

III. Gaps in Literature

The present study examined the linear pattern of relationship of organizational affective commitment and life satisfaction. The employees satisfied with their life also lead to various downstream emotional affect on costumer attitude and behavior that benefit organization. It is important to note that the effect of affective commitment on life satisfaction was found to be significant and stronger than the effect of life satisfaction on affective commitment in Indian culture.

IV. Objective

To examine the relationship between affective commitment and life satisfaction among the managerial employees.

V. Hypothesis

There would be positive relationship between affective commitment and there life satisfaction among the managerial employees.

VI. Methodology

The present study is conducted on 200 managers working in NTPC organization in India mainly from Sonbhadra U.P. Participants age range from 22-42 years (Mean= 30.80 and SD= 4.21); out of them, 200 were male participants. Participants work job tenure ranged from 1-8 years (Mean= 2.35 and SD= 1.58) and total work experience ranged 1-16 (Mean= 5.17 and SD= 3.01). As far as the occupation is concerned, managers working in some limited field such as Administration, welfare sections, and corporate social responsibility etc. were selected for this study, since they get more opportunities to show the commitment and creativity, than the other regular fields of work, due to nature of their work.

Variables in years	Male (N= 200)		
	Range	Mean	SD
Age	22-42	30.73	4.65
Job tenure	1-8	2.34	1.29
Total work experience	1-16	5.45	3.10

VII. Measures

Affective commitment scale eight items based on the affective commitment scale developed by Allen and Meyer (1991) were used to measure affective organizational commitment items were selected on the basis of factor loading. Possible responses were arrayed on a five point Likert Scale. Comprising "strongly disagree"(1), 'disagree' (2)," undecided" (3), "agree"(4), and "strongly agree" (5) Reliability of 0.87 for their eight items affective commitment scale.

Life Satisfaction Scale: This scale was developed by Promila Singh and George Joseph in English and Hindi. It consists 35 items related on five point scale. it contain positive dimensions of life satisfaction labeling pleasure in everyday activities, considering life meaningful, holding a positive self image, having a happy and optimistic outlook and feeling success in achieving goals.

VIII. Data Analysis

In the study the data was analyzed by using SPSS 16.0 statistical Data analysis package. Statistical procedures used in the study included descriptive analysis of means and stander deviations, Pearson's coefficients, regression analysis, and ANOVA.

IX. Results

Table 1 : Means, standard deviations, of study variables

Variables	Mean	SD
Affective commitment	25.00	1.8183
Life satisfaction	1.333	10.737

Table 2 : showed the correlation among the variables.

	Life satisfaction
Affective commitment	.225**

**. Correlation is significant at the 0.01 level (2-tailed)

Table 1 shows the result of descriptive analysis of the affective commitment and life satisfaction. The mean of affective commitment is 25.0 and SD is 1.818 and mean of life satisfaction is 1.33 and SD is 10.73. Therefore in table 2 shows the result of correlation analysis of the affective commitment with life satisfaction. This table shows that affective commitment is highly significantly positive correlated with life satisfaction (r=.225**, p<0.01)

Table 3 : linear regression analysis of predictor variables

Model	R	R^2	ΔR^2	Std. Error of the Estimate	F	Sig.
1	.225a	.050	.046	10.488	10.528	.01**

Therefore in the next table 3 we have compute linear regression analysis. In this table R are the value of the coefficient between the predictor and the outcomes (.225). R2 which we already know the value is .050 which means the life satisfaction level of employees is 5% of the variance in affective commitment. So the inclusion of the predictor has explained a very quite a small amount of the variation in criterion variable. The result of analysis of variance indicate that the main effect of life satisfaction was found to be significant at .01 level and the analysis of variance (f=10.528 p<.01)) was applied; to find out the main and interaction effect affective commitment and life satisfaction.

So overall results has been found that the life satisfaction has been plagued with emotional attachment to the employees of organizational commitment on the basis of everyday activities, considering life meaningful, positive self images, happy and optimistic outlook and felling success in achieving goals etc.

X. Discussion

The aim of present study was to examine the role of affective commitment and its relationship on life satisfaction of the employees. The data has been analyzed in term of the mean, standard deviation, coefficient of correlation, linear regression and analysis of variance. The whole objective of the present investigation was to study the affective commitment relationship with life satisfaction among managerial employees. Hypothesis related to organizational affective commitment with life satisfaction is stated that affective commitment is significantly positive correlated with life satisfaction.

The finding of present study clearly indicated that high levels of employees and managers are more satisfied with their life and jobs also as compared to low levels of managers. It is argued that high job involved managers or supervisors devote more time in their work like administrative sections employees or managers. They are also more attached and committed to their work. Managers with highly satisfied with their jobs and they are more hard working and smarter in comparison to low levels of working employees or non managerial employees. The emotional attachment and feeling of positive attachment of managers make them more satisfied in the job situation.

Similar results are also reported by Sahoo and Rath (2002) in their study of working men that high levels of organizational identification have enhanced feeling of belongingness to their organization and more psychologically attached to family involvement. If high level of psychological attachment in employees indicated high competence, achievement, success, and ultimately enjoy more happiness in family and high satisfaction in work. They also argued that high involvement individuals with a high degree of confidence are likely to more engage in social interaction.

The result of present study is also indicate that the affective commitment has a positive relationship with life satisfaction, at work interfering with family, may be argued effectively that job related managers, identified psychologically, emotional, cognitive attachment with their job and gave the importance of the job to their self image and work harder, are resulting high level of commitment from the perception of their jobs as fulfillment to their important values, and these values are compatibles with their life's need (Parasuraman, Purohit, Grodshalk, 1996).

The earlier finding between affective commitment and life satisfaction indicate the significant a positive relationship (Mayer, Smith, and Leo 2001). The evidence suggested that a group of employees who have demonstrated commitment to their work as emotions; and thus the satisfaction they derived from their jobs has a strong impact on the happiness they find in their life in general i.e. They live to work rather than work to live (Judge, Boudreau, & Bretz, 1994).

Multiple regression analysis and analysis of variance were applied to fin out the relative contribution of predictor variable. The results indicate that the predictor, life satisfaction accounted to only 5% variance in manager's life satisfaction. The analysis of variance (R- ratio) was applied; to find out the main and interaction effect affective commitment and life satisfaction, (10.52 at .001 levels).

Champuse, Stains, Near, Rice & Hunt, (2002) reviewed the literature showing that affective emotional experiences at work are indeed related to affective outcomes outside of work that is, there is spill over of organization based experiences into the extra organizational lives of employees. One of the few examples in the literature is of the Vossel and Froelich (1992), finding that men who were experiencing numerous non-work life change events, reported more tension on the job. The job and family are interacting factors with which a person might cope on a regular basis.

The present study general assumption is that as employees accumulate more years of experience in an organization, they are likely to acquire greater investment like, salary, position and life related events like positive self image, happy, optimistic and other benefits. Particularly in India, promotion of employees is mainly based on their length of service, and consequently it provides major advantage to them in the form of higher position and other life related benefits. It is also generally argued that years spend in a particular organization build an employee's psychological attachment to that organization as well as the employees working life in it.

XI. Conclusion

On the basis of result of the present study conclude that there would be positively significantly correlation between affective commitment and life satisfaction. The life satisfaction level of employees is 5% of the variance in affective commitment. Result has been also indicate that the life satisfaction has been plagued with emotional attachment to the employees of organizational commitment on the basis of everyday activities, considering life meaningful, positive self images, happy and optimistic outlook and felling success in achieving goals. Therefore we conclude that the emotional attachment and felling of positive attachment of managers make them more satisfied in the job situation.

XII. Acknowledgements

References Références Referencias

1. Adams V. H. III, & Jex (1999). Relationship between time management, control work- family conflict and strain. Journal of Occupational Health Psychology. 4 (!), 72-77.
2. Anuradha (2001). A atudy of relationship of attributional style, personality, social support, coping and life event stress with depression. Indian Journal of Appied Psychology.

3. Blau, G.J. & Boal, K.B. (1987).Conceptualizing how job involvement and organizational commitment affect turnover and absenteeism. Academy of Management Review, 12, 288-30

4. Cohen, Sheldon and Sarah D. Pressman (2006) "Positive Affect and Health." Current Directions in Psychological Science 15(3): 122-5.

5. Deaton, Angus (2007) "Income, Aging, Health and Well-Being around the World: Evidence from the Gallup World Poll." NBER Working Paper No. 13317. (Cambridge: National Bureau of Economic Research).

6. Diener, E., R.E. Lucas and C.N. Scollon (2006) "Beyond the Hedonic Treadmill: Revising the Adaptation Theory of Well-Being." American Psychologist 61(4): 305-14.

7. Diner, E, Emmons, R.A. Larsen, R.J. & Griffin, S. (1985). The satisfaction with life scale. Journal of Personality Assesment. 49, 71-75.

8. Gupta, S.P., Sharma, K.D., & Rahman A. (1971). Scientists and their commitment to organizational goals. Economic and Political Weekly, Dec 4, 2447-2450.

9. Hart, P.M, (1999). Prediciting employees life satisfaction: A Coherent model of personality, work and non work experiences, and domain satisfaction. Journal of Applied Psychology. 84(1), 564-586.

10. Kahneman, D. (1999) "Objective Happiness." In E. Diener, N. Schwarz and D. Kahneman, eds., Well-Being: The Foundations of Hedonic Psychology (New York: Russell Sage).

11. Kumar, K., Gopi, & Achamamba (2003). AComparative Study of life Satisfaction and job performance among public and private sector employees. Psychological studies. 38(2), 69-72.

12. Lambert, S.J. (1990) processes linking work and family: A critical review and research agenda. Human Relations. 43, 239-257.

13. Mathieu, J. E., & Zajac, D. M. 1990. A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. Psychology Bulletin, 108: 171-194.

14. Meyer, J.P. & Allen N.J., (1991.) A three-component conceptualization of organizational commitment. Human Resource Management Review,1, 61-89.

15. Meyer, J.P., & Allen, N.J., (1997). Commitment in the workplace: Theory, Research and Application. Thousand Oaks: Sage Publications. Mowday, R. T., Porter, L. W., & Steers, R. M. 1982. Employee-organization linkages: The psychology of commitment, absenteeism, and turnover. New York: Academy Press.

16. Near, J.P.,Rice (1984). Relationship between job satisfaction and life satisfaction: test of a causal model. Social indicators Research. 15, 351-367.

17. Ryan, R. and E.L. Deci (2001) "On Happiness and Human Potentials: A Review of Research on Hedonic and Eudaimonic Well-Being." Annual Review of Psychology 52: 141-66.

18. Sharma J.P., & Bajpai N. (2010). Organizational commitment and its impact on job satisfaction of employees: A comparative study in public and private sector in India. Gwalior: Journal of Business Administration.

19. Sharma, B.R., & Singh, S. (1991). Organizational commitment among Indian managers. NIPM Research Series I. New Delhi: Wiley Eastern Ltd commitment. Journal of Vocational Behavior, 14: 224-247.

20. Silverman, P., Hecht, L., & McMillin, D. (2000). Modeling life satisfaction among the aged: A comparison of Chinese and Americans. Journal ofCross-Cultural Gerontology 15, 289-305.

21. Winer, Y.., Muczyk,, J.P. & gable, M, (1987). Relationship between job, organizational and career commitments and work outcomes: An integrative approach. Organizational Behaviour and Human Performance. 26, 81-96

L'évolution De La Théorie Du Progrès Et Développement Dans La Pensée Arabe : Une Vision Analytique Et Critique De L'ouvrage De Foued Khalil « La Pensée Arabe De La Renaissance : La Fracture Structuraliste»

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Résumé- Pourquoi les pays arabes ont perdu leur hégémonie qu'ils ont pu concrétiser depuis le septième siècle ? Cette question est d'une grande importance car elle demeure jusque-là une question d'actualité à laquelle il faut trouver une réponse. Fouad Khalil a essayé de nous donner quelques éléments de réponse dans son ouvrage intitulé « la pensée arabe de renaissance : la fracture structuraliste». Toutefois, selon le point de vue d'un économiste les arguments avancés dans ledit ouvrage manquent, à notre avis, de certains aspects méthodologiques et analytiques qui peuvent réduire l'efficacité d'analyse présentée par l'auteur. Le présent article essaye, en premier lieu, de présenter l'ouvrage et, en second lieu, de discuter et critiquer ses apports en matière de résultats trouvés.

Motsclés: développement, progrès, fracture structuraliste, mouvement.

GJMBR-G Classification : JEL Code: F02

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RENAISSANCELAFRACTURESTRUCTURALISTE

Strictly as per the compliance and regulations of:

L'évolution De La Théorie Du Progrès Et Développement Dans La Pensée Arabe : Une Vision Analytique Et Critique De L'ouvrage De Foued Khalil « La Pensée Arabe De La Renaissance : La Fracture Structuraliste»

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Résumé- Pourquoi les pays arabes ont perdu leur hégémonie qu'ils ont pu concrétiser depuis le septième siècle ? Cette question est d'une grande importance car elle demeure jusque-là une question d'actualité à laquelle il faut trouver une réponse. Fouad Khalil a essayé de nous donner quelques éléments de réponse dans son ouvrage intitulé « la pensée arabe de renaissance : la fracture structuraliste». Toutefois, selon le point de vue d'un économiste les arguments avancés dans ledit ouvrage manquent, à notre avis, de certains aspects méthodologiques et analytiques qui peuvent réduire l'efficacité d'analyse présentée par l'auteur. Le présent article essaye, en premier lieu, de présenter l'ouvrage et, en second lieu, de discuter et critiquer ses apports en matière de résultats trouvés.

Motsclés: développement, progrès, fracture structuraliste, mouvement.

I. Introduction Générale

Il est communément admis que la question de progrès et développement (PED) n'a cessé de susciter l'intérêt des penseurs depuis l'ère de la renaissance. L'importance accordée à cette question trouve ses fondements au niveau de trois facteurs fondamentaux.

Le premier traduit la volonté de ces penseurs à l'élaboration d'une théorie aussi bien rétrospective que prospective qui permet de déterminer les différentes variables explicatives du progrès et développement. Certes, si la théorie rétrospective paraît souvent simple à concevoir (étant donné qu'elle se rattache à des faits qui sont d'ores et déjà réalisés), une théorie prospective se veut difficile à formuler soit sur le plan théorique ou même méthodologique.

Le second facteur réside dans la spécificité de la question de PED par rapport aux autres questions de réflexion théorique ou méthodologique. En effet, les questions portant sur la politique, la sociologie, la psychologie, la religion ou autres disciplines sont des questions qui visent la recherche d'une règle de conduite, d'un système politique optimal, d'une

organisation sociale efficace ou toutes autres finalités déterminées à priori. Cependant, l'idée de PED soulève une problématique tout à fait différente. Il s'agit bel et bien de la recherche d'un changement de structures productives, mentales, sociales, politiques et mêmes religieuses qui, une fois réalisé (c'est-à-dire le changement), peut aboutir à un développement effectif. Le troisième facteur que, nous considérons comme le plus important est relatif à l'aspect dynamique de la question du PED. Cette dernière ne peut être définie que dans un cadre spatio-temporel en perpétuel mouvement et changement. En somme, nous pouvons dire que la question du PED est stratégique et centrale soit en tant que sujet de réflexion théorique ou en tant qu'objectif économique et social largement sollicité. Dans ce contexte général se trouve élaborer notre travail qui étudiera le problème du PED dans les pays arabes tout en se référant essentiellement à l'ouvrage de Fouad Khalil intitulé « la pensée arabe de la renaissance : la fracture structuraliste».

II. La Problématique De L'ouvrage

L'ouvrage que nous allons explorer est intitulé « la pensée arabe de renaissance : la cassure structuraliste » écrit par Fouad Khalil (en langue arabe) et publié par Dar Al - Farabi en [2002]. L'ouvrage est subdivisé en quatre chapitres qui se présentent comme suit : le premier essaye de donner au lecteur une revue de littérature sur l'ensemble des écrits et des auteurs qui ont traité la question de progrès et de développement dans la pensée arabe. Le second chapitre traite le problème de la cassure structuraliste et dans lequel l'auteur essaye de localiser la problématique de développement dans le monde arabe comme étant une résultante de deux structures différentes : la structure féodale de l'Empire ottoman et la structure capitaliste de l'Europe moderne. Le troisième chapitre a été consacré à l'exposition du courant religieux réformateur dans le monde arabe et dans lequel l'auteur a essayé de détecter la réforme dans la pensée arabe et de démontrer que cette

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pensée n'était pas sujette d'une application dans le monde réel. Le quatrième et dernier chapitre a penché sur la pensée libérale dans le monde arabe et dans lequel l'auteur a essayé de présenter les principaux penseurs libéraux ainsi que leurs principales thèses et de démontrer en quoi ces théories demeurent toujours inactives et inaptes à l'explication et à la participation dans la production d'un « réel arabe » plus prospère .

Ainsi, l'auteur a visé quatre approches formulées par Albert Hourani, Fahmi Jadaan, Wajih Koutharani et Mohammed Abed El - Jabri. Ces auteurs ont essayé de mettre l'accent :
- Sur l'importance que doit accorder la pensée arabe à la question du progrès et développement
tout en gardant leur identité et leur religion intactes (Albert Hourani).
- sur les difficultés de la mise en place un modèle qui permet d'équilibrer le progrès à l'identité (Fahmi Jadaan)
- sur le fait que l'ère contemporaine doit se concilier parfaitement avec les ères précédentes afin de comprendre leurs limites et savoir leurs avantages ce qui permet de fonder une nouvelle société qui défend les valeurs de la liberté, la justice, le libéralisme et l'identité culturelle (originale et moderne) (Wajih Khoutharani).
- sur l'existence, au sein du monde arabe, d'un double dualisme : horizontal et vertical. Le premier consiste en l'existence de structures nouvelles qui imitent directement les structures des sociétés européennes et secundo en l'existence de structures anciennes pré modernes. Le second dualisme consiste en l'existence de deux cultures différentes : La culture rurale et la culture citadine (M. Abed Eljabri).

III. La Problématique De Développement Chez L'auteur : La Cassure Structuraliste

Selon l'auteur (F. Khalil) la problématique de développement, dans les pays arabes, réside au niveau d'une cassure structuraliste qui a caractérisé l'histoire de ces pays à partir de l'avènement du 19ième siècle. Cette cassure est la résultante d'un conflit qui s'est établi entre l'Europe capitaliste et le sultanat Ottoman encore féodale.

En effet, le sultanat Ottoman dont le système économique était féodal avait généré des structures productives incluant des contradictions énormes entre les différentes formes de propriétés. Dans ce contexte général caractérisé par une crise généralisée du système économique du Sultanat s'était produit le choc avec l'Europe capitaliste. Cette dernière a pu créer une double innovation.

La première c'est son adoption d'un système économique capitaliste qui va jouer, selon l'auteur, un rôle moteur dans le développement économique des grands pays capitalistes. Le capitalisme, basé sur

l'accumulation extensive de capital permettra de mener une reproduction élargie qui, à son tour, va contribuer à des politiques de redistribution visant la justice redistributive et le bien – être des individus. De même, ce capitalisme a généré, politiquement, des Etats nations modernes qui dérivent leurs bases de légitimité auprès des individus et leurs origines légales auprès des constitutions et des droits naturels. Un tel système a rendu l'individu un être central est stratégique au niveau de la prise de décision politique.

représentait une méthode de vision au monde (individu, société, Etat, économie etc.). Ainsi, une Europe logique, rationnel et cohérent submergeait.
Dans ce contexte, le sultanat Ottoman était encerclé voire handicapé par deux structures dominantes : une structure féodale archaïque et une structure capitaliste moderne issue de l'Europe. Conséquemment, la société Ottomane s'est trouvée bifurquée en deux structures totalement contradictoires : Une structure capitaliste, intruse « moderne » qui n'a pas des fondements dans le monde réel et une structure historique qui ne peut pas être contemporaine. De ce fait, une cassure structuraliste profonde s'était produite dans le tissu social des pays arabes.

L'hégémonie des pays européens sur les pays arabes a généré des dualismes dans l'économie des pays arabes qui se manifestent par un dualisme économique (secteurs développés secteurs traditionnels ; secteurs formels, secteurs informels…etc.), un dualisme social (cohabitation de la bourgeoisie capitaliste avec les féodaux rentiers, les travailleurs avec les décimateurs, etc.) et un dualisme politique (démocratie formelle et despotisme). La colonisation a participé à la création et au renforcement de ces dualismes, en plus elle a essayé de diviser le monde arabo - musulman en unités politiques microscopiques qui servent le mieux l'intérêt des colonisateurs (c'est-à-dire l'Europe sans tenir compte des intérêts avoués par les sociétés arabes.

L'auteur pensait que la cassure structuraliste traduit l'incapacité des nouvelles structures à réaliser l'intégration sociale au sein des sociétés arabes. Ainsi, deux choix sont possibles : soit la dépasser vers la constitution d'une expérience nouvelle de PED soit s'abstenir et se contenter de reproduire les modèles étrangers. En ce qui concerne le premier choix, l'auteur pense qu'il soit possible lorsque les pays arabes parviennent à mener une restructuration économique, politique et culturelle. Le second choix consiste en l'imitation d'un modèle pré établi de modernisme qui est, selon l'auteur, inexistant soit sur le plan de la pensée soit sur le plan réel.

IV. Critiques Et Commentaires

En examinant l'ouvrage de F. Khalil nous remarquons facilement son importance vu qu'il renferme un effort incontestable qui se résume au niveau de trois

axes fondamentaux. Primo, une réussite au niveau du choix du sujet qui traite une problématique si importante dans le monde arabo-musulman. En effet, dans cette zone géographique et malgré la pluralité des expériences de développement on n'a pas abouti à un modèle unique et efficace. Secundo, la richesse de l'ouvrage, aussi bien, en termes d'informations que d'analyse (une revue de littérature exhaustive et une analyse approfondie). Enfin, l'adoption d'un point de vue socio-économico-historique, constitue, certes un enrichissement scientifique considérable surtout que les autres travaux portant sur ce type de problématiques ont mené des études à caractère absolu (un seul pays), instantané (un horizon fini de temps) ou unidimensionnel (approche historique, sociologique ou économique exclusivement).

Cependant, la question qui se pose à ce niveau d'analyse est la suivante : l'auteur est il parvenu à résoudre et à atteindre les bouts de sa problématique ? A notre avis la résolution d'une problématique similaire à celle posée par l'auteur ne peut, en aucun cas, être limitée ou véhiculée exclusivement par une approche sociologique. Autrement dit, étudier les causes de sous développement des pays arabes seulement en adoptant le point de vue sociologique est loin d'élucider la réalité d'un phénomène multidimensionnel (technologique, économique, sociologique, politique, philosophique, culturel… etc.).

Le résultat du choix préconisé par l'auteur s'est matérialisé au niveau de son analyse qui s'est limitée à l'explication des changements socio – économiques qu'a connu le monde arabo – mesulman durant les quatre derniers siècles. L'auteur s'est contenté d'une analyse rétrospective et statique. Dés lors, deux questions centrales demeurent sans réponse : Comment les pays arabes parviennent- ils actuellement à réaliser le progrès et le développement qu'ils espéraient depuis l'avènement du capitalisme ? Dans quelles mesures ces pays pourront rompre avec le sous - développement tout en construisant un modèle de PED qui leurs est propre ?

Et bien que ces questions soient les plus importantes à traiter dans de telles problématiques, l'auteur n'a pas essayé de leurs y apporter des réponses et s'est contenté des aspects critiques, analytiques et descriptifs. D'un point de vue pragmatique cet ouvrage permet-il de doter les décideurs d'une stratégie de développement claire, pratique et efficace ? La réponse est à priori négative car l'auteur n'a pas pu pénétrer cet horizon pour, au moins, deux raisons fondamentales.

La première est d'ordre méthodologique qui se manifeste dans la nature même du point de vue sociologique qui ne permet pas d'aborder l'aspect prospectif et prévisionnel d'un problème dynamique comme le PED.

La deuxième raison réside au fait que l'auteur a traité la pensée arabe de PED tout en évitant de lui apporter des solutions. Il s'est déconnecté totalement de l'état de PED dans les pays arabes de telle sorte que le lecteur se trouve, souvent, confronter à des termes ambigus, nuancés et non quantifiables : développement, progrès, changement, structures.

D'un autre coté, tout en menant une analyse comparative entre la pensée arabe et la pensée occidentale l'auteur a remarqué que la problématique de PED a pris plus d'ampleur dans l'occident que dans le monde arabo-musulman. En effet, F. Khalil a baptisé son analyse sur la cassure structuraliste qui a caractérisé le monde arabe et qui détermine, selon son avis, la cause principale et stratégique du sous – développement de ces pays.

Toutefois, une question se pose : L'Europe a t– elle connu une cassure similaire ? La réponse à cette question serait affirmative étant donné que l'Europe a connu pratiquement le même contexte qu'a connu les pays arabes et malgré ça elle a pris le dessus. En effet, l'Europe a connu des cassures et non une seule: [Féodalisme/ capitalisme, église/Etat, traditionnel/ moderne, Etat nation / Etat libéral, Socialisme/ capitalisme/ Impérialisme/ communisme/ Etat mondial/, Pauvreté (1929)/ richesse (les années 50 et 60)] ; et pourtant elle a vaincu et a triomphé le sous développement.

Ainsi, pourquoi le monde arabe a échoué là ou l'Europe réussissait ? Les arguments exposés dans l'ouvrage de F. Khalil paraissent peu défendables bien qu'ils soient parfois logiques. Et même si nous supposons la véracité de ses arguments nous pouvons s'interroger davantage : pourquoi des pays si pauvres et si surpeuplés comme l'Inde, la Chine et les pays du Sud-Est asiatique ont pu et ont su éviter les cassures dont l'auteur suppose qu'elles soient l'origine de sous développement dans le monde arabe. A mon avis, lorsqu'on expose le problème de cette façon nous nous rendons compte qu'il existe des mailles perdues dans la chaîne analytique de l'auteur.

Egalement, pour franchir cette cassure structuraliste l'auteur pense que le PED dans les pays arabes est une option possible à condition que ces pays parviennent à mener une restructuration basée sur de nouveaux fondements: indépendance économique, politique et culturelle. Cependant, l'indépendance est elle possible dans un monde intégralement ouvert ? A priori, la réponse serait négative surtout dans un environnement économique qui prône l'ouverture économique et le laisser faire. Toutefois, les Etats et gouvernements arabo musulmans sont invités à consolider leurs indépendances politiques et culturelles ce qui leurs permet de tirer profit de l'économique et de promouvoir les valeurs qui sont propres à nos pays.

V. Conclusion Générale

L'ouvrage de F. Khalil constitue une nouvelle maille qui s'ajoute à la littérature et à la pensée arabe traitant la question du PED dans ces pays. L'importance de l'ouvrage est connotée à la spécificité du sujet de réflexion abordé par l'auteur et qui intéresse aussi bien les nations et les Etats que les individus. L'auteur a essayé, à partir de son ouvrage, de relire la question du

PED en choisissant un point de vue sociologique, qui, selon lui, est jusque là inexploré.

Cependant, et bien que l'auteur ait pu surfer la littérature qui a penché sur son thème de réflexion, il n'a pas pu déterminer une nouvelle pensée qui peut réagir contre la cassure structuraliste qui a caractérisé le monde arabo-musulman. Par conséquent, la réussite de l'auteur dans l'explication du problème de sous développement n'était pas contrebalancée par une réussite similaire au niveau de la proposition de nouveaux modèles permettant la franchise de cette cassure.

Et même lorsqu'il a évoqué des solutions tournant autour de l'indépendance économique, sociale et politique, il a convergé vers des solutions, jugées à l'heure actuelle, peu conformes à la réalité contemporaine. En effet, comment peut-on parler d'indépendance alors que tout le monde prône et exhorte l'interdépendance, parler de protectionnisme alors que le consensus mondial s'est penché pour l'ouverture ?

Le PED est un problème très simple à diagnostiquer, difficile à analyse et à résoudre. Dés lors, pour le franchir il faut une politique qui vise sur le plan économique l'enrichissement du pays via la spécialisation dans des secteurs productifs ayant les avantages comparatifs les plus élevés. L'enseignement, la santé, l'infrastructure sont les outils de développement qui, une fois bien menés, parviennent à relancer le développement et créent le progrès. L'individu formé, éduqué et novateur peut véhiculer ce progrès et peut le pousser à ses limites les plus éloignées. Ainsi, il sera plus commode de repenser la problématique de PED en mettant l'accent sur la promotion de l'individu supposé être le moteur de tout développement effectif. Il s'ajoute à cela l'importance qu'on doit accorder à la préservation de l'identité et des valeurs qui nous sont spécifiques.

Financial Development and Economic Growth: Case of the MENA Region

By Soltani Hassen & Maktouf Samir

Université Tunis El Manar, Tunisia

Abstract- The controversy over the relationship between the financial and real economic sphere was ambiguous. Many studies showed a positive relationship between these two spheres whereas others presented the perfectly opposed thesis. On the basis of data relating to 11 MENA countries, observed during the period 1995-2011 and by using the GMM method of the dynamic panel, the result showed that there is a positive relation between the financial development and economic growth. This relationship and more intense for the role of the MENA financial system.

Keywords: banks, financial market, growth economic, mena countries, GMM dynamic panel.

GJMBR-G Classification : JEL Code: G00, O40

FINANCIALDEVELOPMENTANDECONOMICGROWTHCASEOFTHEMENAREGION

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Financial Development and Economic Growth: Case of the MENA Region

Soltani Hassen [α] & Maktouf Samir [σ]

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I. INTRODUCTION

The recent years have witnessed significant progress in the study of the relationship between financial development and real economic sphere. Two streams of literature come to intervene: one shows the positive effect of the development of the banking sector and financial markets on economic growth, while the other supports the opposite thesis perfectly. The opening shares and boosting the financial system in general, and the banking system in particular, are the source of financial instability and a spread of banking crises have led to a decline in economic growth that is due to the high costs which are taken into consideration. The positive effect of financial development on economic growth has been primarily studied by the authors of financial repression school: ie Mc Kinnon (1973) and Shaw. E (1973) and the authors of the liberal school namely Keynes and Hicks. These latter have shown that an efficient financial, dynamic and modernized system is causing an accumulation of capital, stimulating investment and then an economic development.

The adverse effect of financial development (banking system and financial markets) on economic growth has been adjusted from the recent banking and financial crises in the context of a policy of financial liberalization.

On the one hand, the strong asymmetry of information characterizing financial markets can cause a failure in coordinating the allocation of savings to investment. This campaign of informational asymmetry can distort expectations of investors who prefer to invest in less risky world rather than in another uncertain and risky one. This is by taking into account the degree of risk aversion of investors, the financial market imperfections and high transaction costs. These problems in the financial market and the ineffective intermediation can only hinder economic growth.

On the other hand, the recent crises of banking insolvency have soaked economies in times of recession. This experience has given us an example of the negative influence of the development of the banking sector on macroeconomic performance. These banking difficulties can turn into banking or financial crises generating huge costs to the economy.

In the first part, we will report on the theoretical and empirical work already done on the subject. The second part will allow us to expose our econometric model, our database and the results and interpretations thereof.

II. BRIEF LITERATURE REVIEWS

a) Theoretical

Nowadays, several studies have been concerned with checking the nature of the relationship between financial sector and real economy. The most famous works that highlight the actuality, are those of R. King and R. Levine (1993). Both authors consider the important role of the banking system and financial markets in the development of economic growth. They experienced a strong correlation between GDP as an indicator of economic growth, and the size of the financial system.

The study prepared by T. Beck and R. Levine (2004), represents a good example which has centered its axes on the relationship between banks, financial markets and economic development. They also reveal that development of the banking system and financial markets can lead to the development of economic growth unless some conditions must be met. It has to do with a well-functioning financial system, low information asymmetry, low transaction costs and optimal allocation of resources.

G. M Caporale, P. G. A Howells, A. Mr. Soliman (2004), in their article, have tried to provide an answer to the following question: does the development of the financial market lead to economic development? Results, for which they end up, are consistent with those found in other theoretical studies. A well-functioning financial market can promote economic growth.

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In the same vein, J. Shan, Q. Jianhong (2006) attempted to examine the relationship between financial development and economic development in the case of China. They noted that the contribution of financial development in economic growth can be interpreted as the second power after the contribution of the workers' revenue. The link between the financial sector and the economic sphere has a two-way causality. The development of the financial system (development of the banking system: distribution of credit to finance investments) provides the nominal GDP growth. Thus, they also result in that the high economic growth over the past scores of years has a significant impact on the development of the financial system.

b) Empirical

In one sample out of 74 developed and developing countries with data over the period of 1960-1995, Beck, Levine and Loayza (2000) use two methods to take into account the endogeneity of the financial development variable in a pattern of growth. On the one hand, they make a transversal analysis by instrumenting the financial development from the Anglo-Saxon, Germanic, French and Scandinavian origin of law. On the other hand, in retaining the same instrumental variable, they proceed in a dynamic panel analysis, with a seven period cut over five years, thanks to the estimator GMM (Generalized Method of Moments), the method that allows resolving for example the problem of inversed causality. These authors conclude the existence of a favorable link between the exogenous component of the financial development and the economic growth. But this positive relation passes through the increase of global productivity of factors rather than over the volume of savings and the accumulation of capital. Added that, Rioja and Valev (2002) confirm the idea of these authors.

In a more recent article, Beck and Levine (2004) consider the financial development from a global point of view. They simultaneously examine the role of banking activities' development and also of the stock markets development over the economic growth. The study is done over a sample of 40 countries with average panel data over the period of 1976-1998. The obtained results with the help of Generalized Method of Moments in a dynamic panel, show that the level of banking development (measured by the ratio of credits in the private with regards to GDP) and the level of the stock markets' development (measured by the turnover ratio) each one exercises in an independent way a favorable effect on the economic growth[1].

To conclude, despite the crucial role of the financial development in the process of growth, there are recent researches which show that there exist other sources of growth such as public spending, investments in human capital, research spending and the development of technological innovation etc…

Recently, Luintel and Kahn (1999) have studied the long terms relation between the financial development and the economic growth over the base of multivariate VAR patterns by using a sample of 10 countries during the period of 1950-1990. The authors find a double causality relation between the variables for each sample country. Christopoulos and Tsionas (2004) estimate that, over a sample of 10 countries with the help of a pattern of multivariate co integration in panel, the obtained results sustain a long term causality which goes from the financial development to the economic growth.

Despite the multitude of research works which find a positive link between the financial development and the economic performance, an emerging literature questions the strength of this relation. Also, Andersen and Tarp (2003)[2] have shown that the favorable relation between the financial development and the growth rate of the product focused by Levine, Loayza and Beck (2000) is no longer checked when we restrict their sample to only sub-Saharan African countries and Latin America, because these countries witnessed crises in the 1980s when they liberated their financial system and put quicker reforms of liberalization. They also consider the studies about time data, proper to a country, do not clearly give a causality going from the financial development to the growth. The authors conclude that the favorable effect of the financial development over the growth is not sufficiently studied by the empirical works. Favara (2003)[3] has developed a study about the link between the finance and the growth on the empirical plan and has presented results based on transversal data and panel data with a variety of econometric method. He uses two indicators which measure the financial development namely the liquid assets and the credits of the private sector. With the help of the first method (over the transversal data), the financial development appears correlated positively to the growth but this relation disappears when we attempts to examine the endogeneity of the financial development for example through the legal origin as an instrument[4] whereas, with the generalized method of moments in dynamic panel, the financial development becomes insignificant in the equation of growth.

In short, the author brings out an ambiguous relation between the financial development and the economic growth. Le level of credit related to the GDP influences the growth only in the intermediary steps of development.

Emmanuel (2007) reconsiders the link between the financial development and the growth over the empirical plan of 22 Sub-Saharan African countries in

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[1] Kpodar. K, (2006), opt. cit. P: 90.

[2] Guillaumont. S et Kpodar. K, (2004), opt. cit. P : 12.

[3] Kpodar. K, (2006), opt. cit. P : 99

the period of 1960-2002. The author considers that the positive and significant correlation between the indicators of financial development (represented by the ratio of the monetary mass M_2 to the GDP and the ratio of credit to the private sector and to the GDP) and the growth of GDP is mitigated. On the one hand, the relation of causality varies in the sense between bidirectional and unidirectional going from financial development toward economic growth.

III. DATA AND METHODOLOGY

The main objective of this study is to analyze and to check empirically the existing relation between the financial development and the economic growth in the MENA countries namely (Saudi Arabia, United Arab Emirates, Bahrain, Egypt, Jordan, Morocco, Oman, Iran, Lebanon, Kuwait and Tunisia). In order to do this, we have chosen 11 MENA country observed during the period of 1995-2011. The econometric method used is that of GMM dynamic panel. The relative data to the financial development and the economic growth are obtained nearby the database of the World Bank (2012). Some variables are obtained from other sources[5].

a) Specification of Psttern

There are several econometric patterns which study the link between the financial development and the economic growth. For this, our choice of patterns relies on the existence of variables as we are going to try in this empirical part to see the link between the financial development and the economic growth in the MENA region.

In reference to the works of Samy. N and Samir. G (2007) our pattern can be written in the following form:
$$GDPi, t = \beta_0 + \beta_1 \, CREDT_{i,t} + \beta_2 \, CAPT_{i,t} + \beta_3 \, IC_{i,t} + \beta_4 \, FLIB_{i,t} + \beta_5 \, OPNS_{i,t} + \beta_6 \, INF_{i,t} + \beta_7 \, IIP_{i,t} + \varepsilon_i$$

To control the individual specific and time effects as well as to overcome the problem of endogeneity of variables, we are going to use the estimator of Arellano and Bond (1991) which consists of taking, for each period, the first difference of the equation to be estimated to eliminate the specific effects of each country as well as to instrument the explanatory retarded variables. In our pattern, the retarded variable is that of GDP. Our pattern can be written in the following form:
$$GDPi, t = \beta_0 + \beta_1 \, GDP_{i,t-1} + \beta_2 \, CREDT_{i,t} + \beta_3 \, CAPT_{i,t} + \beta_4 \, IC_{i,t} + \beta_5 \, FLIB_{i,t} + \beta_6 \, OPNS_{i,t} + \beta_7 \, INF_{i,t} + \beta_8 \, IIP_{i,t} + \varepsilon_i$$
With :

$GDPi,t$: Real growth rate of GDP per capita
$GDPi,t-1$: Real growth rate of GDP per retarded capita

CREDT: Banking credit in the private sector compared to the GDP.
CAPT : Stock market capitalization compared to real GDP per capita.
INF : Inflation rate.
OPNS : Opening rate measured by the total of X° and of M° related to the GDP.
FLIB : Dummy Variable, reflecting the financial liberalization .
IIP : Dummy Variable , reflecting the political instability .
IC : Dummy Variable, reflecting the corruption.

b) Results and Interpretations

We have performed the method of generalized method of moments (GMM) dynamic panel with software STATA 11.0 to estimate the pattern which we have presented above by using the estimator of Arellano and Bond (1991). The results of our estimation are presented in the following table.

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[5] http://donnees.banquemondiale.org
http://info.worldbank.org/governance/wgi/sc_country.asp
http://viewswire.eiu.com/site_info.asp?info_name=social_unrest_table &page=noads Geert Bekaert et al. **(2005)**

Table 1 : GMM dynamic panel regression of the dependent variable (GDP)

Variables	Coefficient	Std, Err	Z	P>|Z|
C	11,15456	2,406519	4,64	0
gdp_{t-1}	0,1809195	0,0769512	2,35	0,019
credt	-0,075364	0,0193052	-3,9	0
capt	0,0058239	0,0097215	0,6	0,549
inf	-0,017414	0,0226411	-0,77	0,442
opns	0,0417595	0,0458591	0,91	0,363
flib	-1,480606	2,545825	-0,58	0,561
iip	-3,041736	1,132735	-2,69	0,007
ic	-1,205207	0,9856397	-1,22	0,221
Wald chi2 (8)	54,98			
Prob > chi2	0			
Nb of instruments	118			

Instruments for differenced equation
GMM-type: L(2/.).gdp
Standard: D.credt D.capt D.opns D.inf D.flib D.iip D.ic
Instruments for level equation
Standard: _cons

The table summarizes the results of the regression of financial development indicators (Stock market capitalization compared to real GDP per capita (capt) and the Banking credit in the private sector compared to the GDP (credt)) over the economic growth after the control of the equation by a certain number of macroeconomic variables (the inflation rate, the opening rate, the financial liberalization, the political instability and the index of corruption). We remark from this table that there are explanatory variables which are statistically significant whereas others are not and therefore they do not have an impact on our endogenous variable.

The variable (gdpt-1) is correlated positively and with a significant manner with our variable to be explained (gdp_t). In other terms, the growth rate of real GDP per capita of the year (t) depends on that of the year (t-1) in a positive and significant manner.

Yet, we note that the coefficient relative to the level of credits (credt) distributed by the banks and other financial institutions in the private sector is significantly negative. This finding can be linked directly to the predominant public sector in the allocation of credits. Consequently, the countries of the MENA need to improve the process of allocating credit by the privatization of national banks, by reinforcing the regulation of credit and by the reinforcement of the competition in the banking sector.

In addition to the weak coefficient (0.58%), the results of our estimation show that the stock market capitalization acts in positive and non significant manner

over the rate of growth of the GDP per capita. This result can be explained by the high level of the financial regression and the weak stock market which is unable to sustain a durable economic development in the MENA region, but also by the slow and unbalanced growth, which weakens any relation between the financial development and the economic growth.

Similarly, the commercial openness of the MENA countries has a positive and non significant effect on their economic growth. This stipulates that the increased mobilization of savings and the best allocation of resources in the economy, allow an extension of production possibilities and the adoption of more efficient techniques, this reinforces the specialization, the technological innovation and the economic growth.

Concerning the effect of the financial liberalization, the variable (flib) acts in a negative and non significant manner over the growth rate of the real GDP per capita (GDP). In order to argue for this negative relation between the financial liberalization and the economic growth in the MENA region, we can mention that almost half of the countries of our study have not proceeded in the process of the financial openness. Moreover, for those that have opted for liberalization programs, this policy of liberalization was partial and gradual as in the case of Tunisia and Morocco. Similarly, this result which is conditioned by an unstable macroeconomic environment is detected by this regression starting from a coefficient of political instability (iip) which is significantly negative as it is

shown in the theoretical and empirical literature which is contradictory to that of Mc Kinnon (1973) and Show (1973). In the same context, we have obtained a negative sign for the variables of corruption (ic) and of the inflation (inf). This incites the governments of the MENA countries to present a stable environment from a political and economic point of view.

IV. CONCLUSION

To conclude, we have used a sample of 11 countries of the MENA region during the period of 1995-2011. We test both the independent impact of the stock market and the banking development over the economic growth. In general, the regressions are conducted with the estimator of Arenallo and Bond (1991) which uses the generalized method of moments (GMM) and through different explanatory variables which show that the financial development is without importance or even harmful to the economic growth in the MENA region, which is counter-intuitive and should be justified by reference to the theory. This absence of relation should be linked either to underdeveloped financial systems of the MENA region which hinder the economic growth or to the instability of growth rates of real GDP per capita in the MENA region which affect the quality of the relation between the finance and the economic growth.

Concerning the political implication, we should draw proposals in terms of results. It is evident that the improvement of the performance of the financial system in the region is absolutely essential in order to allow the financial development as a stimulator of growth. Consequently, MENA countries need to improve the process of credit allocation by privatizing national banks, reinforcing the regulation of credit and the reinforcement of competition in the banking sector. Furthermore, a preliminary condition seems that the regulatory infrastructure is well developed and that measures are taken in order to reduce the extreme volatility of share prices, so as to allow the stock market of the MENA region to stimulate the economic growth.

After these results and taking in account the other most used indicators in the literature to measure the efficiency and the activity of financial development (the ratio of rotation of shares and passive liquids, M3/GDP), we can ask the following question: How does the financial development affect the relation between the foreign direct investments and the economic growth?

REFERENCES RÉFÉRENCES REFERENCIAS

1. M. Arellano, and S. Bond, "Some Tests of Specification for Panel Data", Monte Carlo [] Evidence and an Application to Employment Equations", Review of Economic Studies, Vol. 58(2), pp. 277-97, 1991.
2. B.H. Baltagi, P.O. Demetriades and S.H. Law, "Financial development and openness: Evidence from panel data", Journal of Development Economics 89, 285-296, 2009.
3. T. Beck, R. Levine, "Stock markets, banks and growth: panel evidence", J. Bank. Finance 28, 423-442, 2004.
4. T. Beck, R. Levine and N. Loayza, "Finance and the sources of Growth", Journal of financial economics, vol. 58, n 1 et 2, PP261-300, 2000.
5. J.H. Boyd, R. Levine, B.D. Smith, "The Impact of Inflation on Financial Sector Performance", Journal of Monetary Economics, 2000, forthcoming.
6. G.M. Caporale, P.G.A. Howells, A.M. Soliman, "stock market development and economic growth: the causal linkage" journal of economic development, 2004.
7. D. Christopoulos and E. Tsionas, "Financial Development and Economic Growth : Evidence from Panel Unit Root and Cointegration Tests", Journal of Development Economics, vol. 73, n°1, pp. 55-74, 2004.
8. W. Easterly, R. Gatti, S. Kurlat, "Development, democracy, and mass killings" Journal of Economic Growth, 11, 129-156, 2006.
9. A. Emmanuel, "développement financier, croissance économique et productivité globale des facteurs en Afrique Subsaharienne", Université de Cocody-Abidjan, 2007.
10. S.G. Jeanneney and K.R. Kpodar, "Développement financier, instabilité financière et croissance économique" Document de travail de la série Etudes et Documents E 2004.13
11. G. Jones, W.J. Schneider, "Intelligence, human capital, and economic growth: A Bayesian Averaging of Classical Estimates (BACE) approach" journal of economic Growth, 11, 71-93, 2006.
12. R.G. King, R. Levine, "Finance and growth: Schumpeter might be right", Quart. J. Econ. 108, 717-738, 1993.
13. K. Luintel and M. Khan, "A Quantitative Reassessment of the Finance-Growth Nexus: Evidence from Multivariate VAR", Journal of Development Economics, vol. 60, pp. 381-405, 1999.
14. R. McKinnon, "Money and capital in economic development", Washington, DC: Brooking Institution, 1973.
15. N. Samy and G. Samir, « Stock markets, banks, and economic growth: Empirical evidence from the MENA region" Research in International Business and Finance 21; 297-315, 2007.
16. S. Shaw, Edward, "Financial Deepening in Economic Development", New York: Oxford University Press, 1973.

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An Econometric Analysis of the Nexus between Credit to the Private Sector, Inflation and Economic Growth: Case of Cameroon 1965 – 2010

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Abstract- This work is centered on bringing out the link between credit to the private sector, inflation and economic growth. When lending to the economy is insufficient, it poses a problem of slow growth and when credit to the economy is too high, it poses a problem of hyper-inflation. Using data from world development indicators, it employs a Vector auto regressive model involving a system of three equations, testing for the direction of causality amongst the variables using the VAR Granger causality block exogeneity Wald Tests. The results obtain shows that inflation has a positive and significant effect on growth, economic growth has a positive and significant effect on credit to the economy and credit to the economy has a negative and significant effect on inflation. Inflation granger causes economic growth, economic growth granger causes credit to the private sector and credit to the private sector granger causes inflation.

ANECONOMETRIC ANALYSISOFTHENEXUSBETWEENCREDIT TOTHEPRIVATESECTORINFLATIONANDECONOMICGROWTHCASEOFCAMEROON19652010

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Abstract- This work is centered on bringing out the link between credit to the private sector, inflation and economic growth. When lending to the economy is insufficient, it poses a problem of slow growth and when credit to the economy is too high, it poses a problem of hyper-inflation. Using data from world development indicators, it employs a Vector auto regressive model involving a system of three equations, testing for the direction of causality amongst the variables using the VAR Granger causality block exogeneity Wald Tests. The results obtain shows that inflation has a positive and significant effect on growth, economic growth has a positive and significant effect on credit to the economy and credit to the economy has a negative and significant effect on inflation. Inflation granger causes economic growth, economic growth granger causes credit to the private sector and credit to the private sector granger causes inflation.

Keywords: credit to the private sector, inflation, growth, monetary policy.

I. Introduction

Central banks are of paramount importance in the development of the banking and financial system of a country. Their various tasks consist of : ensuring monetary emission thus setting interest rates; supervising   the functioning of financial markets, ensuring the compliance to regulations associated to risks   (solvency ratio) and to financial institutions (especially deposit banks) , acting as banker of last resort in the event of a systemic crisis.

According to the Annual Report of the BEAC (1992), in Cameroon, we can find out that the advances offered by the BEAC to commercial banks are not fully utilized (247,700,000,000FCFA uses against a ceiling of 310,400,000,000FCFA to June 30, 1992). This was confirmed by Fouda (2009) who revealed that despite the liberalization of the financial and banking sector in the early 1990s, banks keep holding excess liquidity, but sluggish credit is observed. Under the employment and growth strategy paper (EGSP), we noticed that from 2003 to 2008 (period of implementation of the poverty reduction strategy paper), the long term loans represent

an average less than 3.5% of total loans. Yet the long-term credits are essential to the development of a sustainable growth in Cameroon.

Providing a level of credit to the economy that can be up to the growth and price stability objectives is a real task to CEMAC authorities. When the level credit to the economy is weak or insufficient to stimulate consumption and hence growth, it remains a problem, such as that of sub-inflation or suboptimal inflation. However, when they are too high, the risk of limiting the living standards of the population through inflation is very imminent. Research at the level of CEMAC have examined the impact of inflation on growth, for instance, (Bikai and Kamgnia, 2011; Mantsie 2003; Engone, 2009). But to our knowledge, the joint and reciprocal influence of credit to the economy, inflation and growth which is nevertheless real in many developed and developing economies remains an unsolved problem in Cameroon. Showing that credit to the economy, inflation and growth are causal and mutually influential constitute a shade that is yet to be clarified within the context of Cameroon.

The objective of this study is to determine the links and potential effects existing between credit to the economy, inflation and economic growth in Cameroon. The significance of this study stems from the opportunities accruing from a high variability of three variables within an economic environment of positively stable fixed exchange rate regime.

The rest of our inquiry is structured around three sections, the first presents a review of the relevant literature, The second analysis the methodology and the econometric model, while the third section is devoted to results and conclusion.

II. Literature Review

a) Credit to the Economy and Inflation

The Modigliani (1986) - Miller (1991) theorem states that the equivalence of different funding sources dominated the literature in the late 1950s. During the second half of the 1980s, through an extensive literature, many economists tried to demonstrate the specific role of bank credit in the transmission of monetary shocks.

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According Boissieu (1990), it is to integrate the imperfections of the credit and capital markets, and particularly the information asymmetries and all their implications: there are many risk premiums, particularly in the external premium financing. He points out that the credit channel actually has two interlinked components: the channel that passes through the impact of changes in interest rates on the situation and the behavior of borrowers, and those interested in the impact of changes in interest rates on the behavior of lenders, particularly banks. He thus, stressed that the channel of credit rate is therefore generally not independent of the interest rate channel, and both play in the same direction to enhance the impact of monetary policy.

In addition, Cameroon is a member of CEMAC which is a segmentation of the franc area. All these countries have experienced a given period of excess liquidity of their banks. Thus, according to Fouda (2009), the fact that banks hold a certain volume of liquidity is theoretically justified by their liquidity insurance mission. But over the past fifteen years, liquidity holdings of the banks of the franc zone have been abundantly higher than what is necessary in fulfilling this mission and, paradoxically, the loans granted to the economy have been dropping.

According to Nubukpo (2003), since 1989, the monetary policy of the of Bank of West African States (BCEAO) is based on the increased use of market mechanisms, thus devoting to the option of a direct regulation of banking activity. A key role is granted to the interest rate which becomes the main instrument of monetary policy, particularly since the abandonment of the credit crunch that occurred in January 1994. He examined the impact of movements in interest rates of the BCEAO on growth and inflation between 1989 and 1999. He found out that interest rates negatively influence inflation and growth in the short run, but in the long run they positively influence growth and negatively influence inflation. Considering Boissieu (1990), we can talk of a relationship whose direction is to be determined between credit to the economy, inflation and growth.

Tallman and Chandra (1996) in the case of Australia, examined two systems of VAR variables (set of monetary factors and production), three systems variables (including inflation), four systems (including the interest rate) and five systems (including exchange rates). The authors found out that sets of monetary factors did not contain any important information to explain subsequent changes related to output growth or inflation.

The empirical evidence provided by Bullard (1995) tended to suggest that the strength of the relationship between liquid assets and inflation depends on the monetary measure used and the time horizon covered in the research. A broader set of factors offers surprising results whereas closer factors only lead to the balanced proportional theory, stipulated by the quantitative balance proportional relationship results. The extension of the sample size, especially when there is a series of monetary innovations, can lead to an important impact on the results.

b) *Credit to the Economy and Economic Growth*

The introduction of money in the new growth theories perpetuated a common divide between authors who believe that any monetary policy is doomed to failure and those who believe that, in the Keynesian tradition, an expansionary monetary policy can influence the level of activity. Modern literature on the subject date of work Tobin (1965) who showed that money is able to influence the level of economic activity by changing household portfolios. Money is considered as a financial asset. Given a certain level of wealth, the capital intensity of the economy (capital / head) depends on the distribution of this wealth between capital and money. In the event of a fall in the profitability of money due to inflation, economic agents will prefer to hold real assets in their portfolio, which will lead to a fall in investment and thus lower growth.

Sidrauski (1967) is in a diametrically opposite opinion. He assumes that money enters the household utility function, because it provides a flow of services resulting from its detention. The results lead to the determination of the high neutrality of money. Money in this case would have no effect in the short-run on economic activity and in the long-run as well because it is not likely to influence the GDP growth level.

According to James (1970), money is a means of action. It is not just a "veil" or just a "medium of exchange" and a "standard of values", but a catalyst that promotes the growth of the economy, changes in the distribution of income and a "prime source of power." Beyond certain levels, the development of credit transactions leads to a rise in prices, without any positive effect on the level of economic activity. The monetary authorities must sit in order to determine the growth rate that is more consistent with the monetary equilibrium.

Peg (2003), of the Federal Reserve in St. Louis regresses changes in quarterly GDP growth in subsequent volumes to changes in interest rates on federal funds over the period 1962 -2002. He found out that a 1% increase in interest rates, leads to a reduction of 0.2% in the growth of quarterly activity within the next two years. On the other hand, a 1% decrease in interest rates on federal funds increases the growth of the real activity by only 0.5% over the two years following the shock. We can observe an asymmetry in the response of the real economy to changes in monetary policy instruments, which apparently confirms the idea that the action of the central banks is slower in restoring economies from a recession than pushing them to overheat under an expansionary regime. The weak response of the economy to decreasing interest rate results from the fact that growth is first and foremost a

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real phenomenon, as opposed to inflation, which could be a monetary phenomenon.

Goldsmith (1969) conducted a study using a multiple regression model to show the effect of domestic credit on the growth rate of GDP per capita. He concluded that domestic credit and the per capita GDP growth are positively correlated. De Gregorio and Guidotti (1995) conducted a study on 100 countries for the period from 1960 to 1985 and the same study of 12 countries of Latin America for the period 1950 to 1985. They used a regression model to show the effect of credit on per capita GDP growth. Using domestic credit to the private sector as a percentage of GDP as an exogenous variable, they carried out the same study for 100 countries, and revealed that credits permitted an increase in the rate of economic growth for 12 countries in Latin America. The Credit granted to the domestic private sector was significant and negatively related to economic growth, due to liberalization within an environment poorly regulated by the government.

Acaravci et al (2007) in Turkey conducted a study covering the period 1970 to 1992 using a dynamic time series model to determine whether there is a causal relationship between GDP growth and domestic credit granted by the banking sector. The result showed that in Turkey there is a one-way relationship between credits granted by the banking sector and economic growth, there was also an absence of a long-term relationship between these two variables. The Granger causality test showed that domestic credit granted by the banking sector led to economic growth in Turkey.

c) Inflation and Growth

The classical economists believe that in the short run, monetary impulses exert only limited effects on economic activity. According to them, household savings and investments of firms are not very responsive to changes in the interest rates. Thus, the proponents of this view believe that money is a veil, in other words, it is neutral.

However, according to the monetarists, monetary policy has an active role in economic growth. From their point of view, a restrictive monetary policy leads to lower relative prices of monetary, financial and real assets. This results to a change in aggregate demand which is consumption and investment, as well as cumulated real stocks. Thus Friedman (1968), considers that short-term variations in the quantity of money can have temporary real effects due to the initial price rigidity. But in the long run, under the assumption of price flexibility and labor markets, changes in the money supply have an effect on the general price level. Production and employment are not affected. Mantsie (2003), determined within the framework of CEMAC area, the effect of inflation nuisance on growth. He found out that there is an inflation rate below 4.75% in the CEMAC area. In the same vein, other authors such as Fisher [1993] working on panel data for 13 non-

OPEC countries and for the period 1961 1988, Barro [1995] working on data in longitudinal sections of 100 countries and three decades (1960-1990) found an impact on the annual per capita growth respectively of - 0.13% and - 0.024% and of a 1% increase in inflation beyond the threshold potential.

III. Methodology

The data used in this work are from a secondary source, originating from the annual publication of the World Bank, more specifically from the CD-ROM (WBI-2011). The study covers the period from 1965 to 2010. This choice is justified by the need to integrate the various evolutions in money and credit policies within the CEMAC area with a specificity accorded to the Cameroonian economy.

a) Variables
  i. The rate of inflation

In order to measure inflation, we use the example of Claus (1997) and Blix (1995) cited by Engone (2003), which is the GDP deflator. When searching the target level of inflation in the CEMAC zone for the latter, the relationship between the observed inflation measured by the GDP deflator, on one hand, economic growth and money supply, on the other hand. It provides information about the macro-economic stability and has a permanent effect on economic growth. Inflation as measured by the annual growth rate of the GDP implicit deflator shows the rate of price change in the economy as a whole. The implicit GDP deflator is the annual percentage change in GDP.

  ii. The growth rate

In order to consider growth, we use the natural log of real GDP as Fischer (1993) and Sarel (1996) cited by Mantsie (2003) when determining a threshold at which inflation is harmful to the economy. We also drew inspiration from Nubukpo (2003) who measured the impact of key interest rate on inflation and growth in the UEMOA area, and used the GDP deflator and the natural log of real GDP respectively to account for inflation and growth. The gross domestic product (GDP) at market prices is the sum total of gross value added by all resident producers in the economy plus (+) any product taxes and minus (-) any subsidies not included in the value of the products. GDP per capita is gross domestic product divided by midyear population. The growth rate is the rate of change in gross domestic product.

  iii. Credits to the economy

It is credit granted by the banking sector to the private sector and to households. It includes all loans in various sectors on a gross basis, with the exception of credit to the central government, which is net. The banking sector includes monetary authorities and banks. The variable considered in this study is bank credit to the private sector.

Table1 : Abbreviation of variables

Variables	Abbreviations	Measures
Credit to the economy	CE	CE in % of GDP
Inflation rate	TINFL	Change in the real GDP deflator
Growth rate of the GDP	TPIBR	$(PIBO_t - PIBO_{t-1})/ PIBO_{t-1}$

Source: Based on a literature review and comments.

b) *Relationship Between Credit To The Economy, Inflation And Growth*

Authors such as Aiyagari and Gertler (1985), Leeper (1991), Sims (1994) and Woodford (1995, 1997) studied the configurations of monetary and fiscal policies, where one would be exogenous to the long-term equilibrium (it is dominant) and the other endogenous to the balance (it is dominated and must ensure compliance with the budget constraint of the state).The model used is a direct generalization of autoregressive models. It is a VAR (Vector Autoregressive) model which 'was popularized by Sims (1980). Beyond estimating individual coefficients, it will estimate the overall system dynamics. The functional form of the model is as follows:

$$\Delta TPIBR_t = \gamma_1 z_{t-1} + \sum_i \beta_i \Delta TPIBR_{t-i} + \sum_j \alpha \Delta TINFL_{t-j} + \sum_k \tau_k \Delta CE_{t-k} + \epsilon_{t1} \qquad (1)$$

$$\Delta CE_t = \gamma_2 z_{t-1} + \sum_i \beta'_i \Delta TPIBR_{t-i} + \sum_j \alpha'_i \Delta CE_{t-j} + \sum_k \tau'_k \Delta TINFL_{t-k} + \epsilon_{t2} \qquad (2)$$

$$\Delta TINFL_t = \gamma_3 z_{t-1} + \sum_i \beta''_i \Delta TPIBR_{t-i} + \sum_j \alpha''_i \Delta CE_{t-j} + \sum_k \tau''_k \Delta TINFL_{t-k} + \epsilon_{t3} \qquad (3)$$

With γ, β, α, d as coefficients and ϵ_i the stochastic error terms.

Table 2 : Summary of the expected signs

Dependent variables / Independent variables	TPIBR	TINFL	CE
CE	+	+	? ±
TINFL	? ±	? ±	+
TPIBR	? ±	? ±	+

Source: Author, based on a literature review

IV. PRESENTATION OF RESULTS

In this section, it is necessary to conduct a comparative analysis of the evolution of our variables, to conduct an analysis of causality between growth, credit to the economy and inflation, and finally to estimate VAR (Vector Autoregressive) model.

a) *Comparative Evolution of Some Variables*
  i. *Comparative evolution of credit to the economy and inflation*

The effectiveness of the distribution policy of credits expected to result to changes in two indicators in the same direction. That does not seem to be indicated by visual inspection. Indeed, over the period of study, it is generally observed a limited identical trend in the inflation rate and the change in credit to the economy. This is shown on figure 1 below.

Figure 1 : Comparative evolution of credit to the private sector and inflation from 1965 to 2010
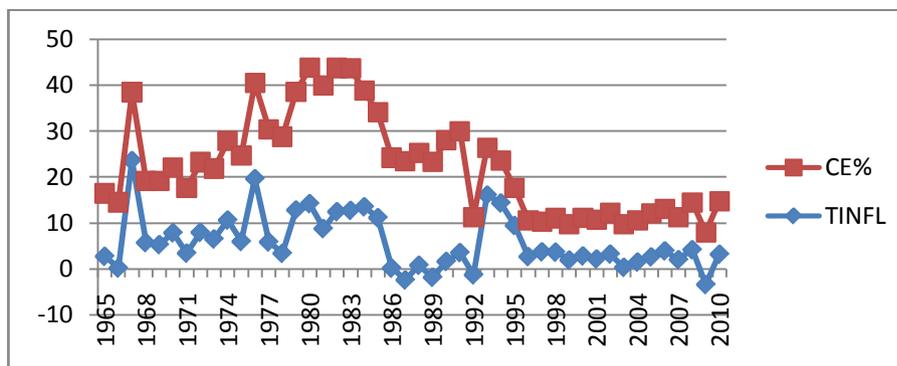
Source: author's computation using excel and WDI (2011)

ii. *Comparative evolution between credit to the economy and growth rate*

The analysis of the figure below(figure 2) shows an almost similar trend in both indicators between 1965 and 1993. In this same period, credit to the economy did not fluctuate much, while the rate of growth has been a saw tooth evolution. Since 1994, growth has become very sensitive to changes in credit to the economy which are slim. The two curves are almost superimposed over the entire period, which implies the sensitivity of growth to changes in credit.

Figure 2 : Comparative evolution between credit to the economy and growth rate
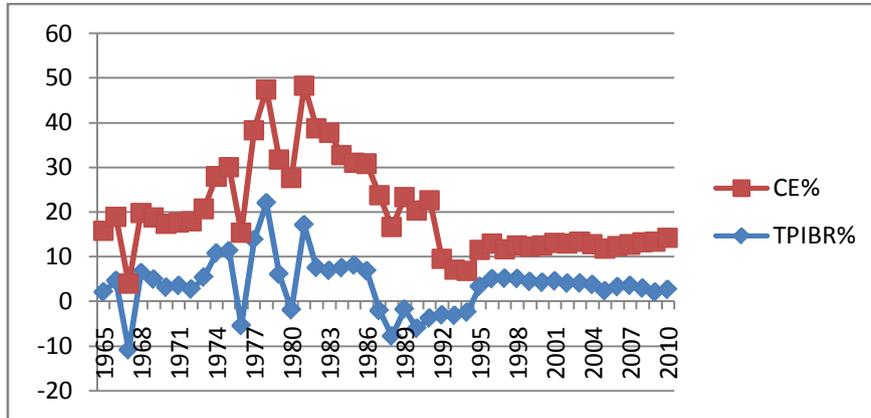
iii. *Comparative evolution between growth and inflation from 1965 to 2011*

From figure 3 below, it is observed that the evolution is similar with the fluctuation of inflation and growth increasing until they arrived their peak in 1978 but slowed down between 1980 1986. From 1986 these two variables began falling till 1992 for GDP growth and 1994 for inflation, which can be explained by the economic and financial crisis during this period. Afterward, the two variables observed a progressive evolution but at a slow rate till 2008. After this period, the growth rate of GDP and inflation decreased basically caused by the subprime mortgages of 2008 until 2010 where they witnessed a rise again.

Figure 3 : comparative evolution between growth and inflation from 1965 to 2010
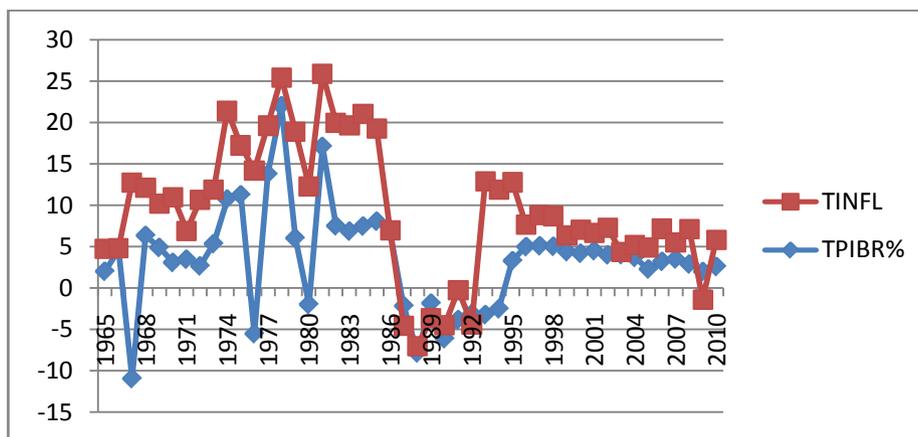
Source: author's computation using excel and WDI (2011)

The analyses of the figures presented above, while providing an insight of the evolution of these macroeconomic indicators, is an insufficient to assess the existence of any correlation between the variables. This justifies the need for further studies with a view to a better appreciation of the real and mutual impacts of changes in credit to the economy econometric model of inflation and growth. At the end of this section, we can conclude that in Cameroon, the economic environment is very unfavorable considering the evolution of credit to the economy, inflation and growth.

b) *Presentation and Analyses of Results*

The unit root test using the ADF test shows that all the variables are non stationary at level form (appendix 1) but stationary at first difference(appendix 2).

After determining the optimal number of lags which showed the optimum lag length to be 2 for all the

variables(appendix 4) from the Akaike and Schwarz criteria, the criterion being the choice of the lag corresponding to the minimum value selected by two criteria coefficients.

It is necessary to determine the causal link between the variables (credit, inflation and growth) and to determine the interplay between these three variables. The decision rule was opted comparing the corresponding probability thresholds for each coefficient significant at the 1%, 5%, 10%. When the probability is less than the significance level, the associated variable y becomes the dependent variable. From appendix 4 ,table 2, it is clear that in the short-term credit will not cause growth, which makes sense because most of the loans to investors are short term and highly selective and generally with high interest rates. Inflation in turn causes the short-term growth with a threshold of 1%. This can be explained by the fact that a change in the inflation rate translates directly into economy since it stimulates private sector investment through the quest for high profit. Credit to the economy is caused by the short-term growth with a threshold of 5%. This finds its full meaning when credit providers grant loans to investors as functions of their previous results. On the other hand, inflation does not cause short-term credit, which can be explained by the fact that inflation has very diverse sources, the ability of investors and creditors themselves to anticipate the future is limited. The inflation rate cause growth in the short term, we may well think that the effects of other variables on inflation can only transmit the effects that it receives with a delay. Credits cause inflation in the short term with a threshold of 1%. This is explained by the fact that lending rates are too high in Cameroon leading to an increase in the cost of production. This is then transmitted to higher prices in the market.

c) *Estimation of Model*

The objective of the study is not being able to identify in their diversity, all the variables that influence inflation and growth, but to highlight the combined effects of credit, inflation and growth. That is why our exogenous variables are variables whose short-term variation is important.

These results are interpreted taking into account that each variable in turn is a dependent variable. When growth is a dependent variable, it is positively and significantly (at 5%), influenced by the growth rate with a lag period of 1. the inflation rate both at lag period of 1 and 2 influence GDP positively and significantly at 5% and 1% respectively . So in Cameroon, current growth is significantly influenced by passed growth. The coefficient of inflation rate at lag 1 and 2 have positive signs showing that a short-term rise in inflation is challenging for growth because when prices rise in the short term, producers make profits on their stocks. But as stocks run out, they are forced to integrate different

production costs in new stocks. Credits on the other hand have an insignificant effect on growth in the short term. The reason may be the non-significance of the same amount of credits and the low profitability of some investments due to poor monitoring of the implementation and finance of projects.

Furthermore, credit to the private sector is influenced positively and significantly at 5% by the GDP at a lag period of 2. This show the results of the previous companies are a key factor for future funding. The inflation rate meanwhile, has no significant effect on credit. If the effect of the change in the inflation rate is transmitted to interest rates, inflation could have an effect on supply.

About inflation as the dependent variable, it is found that growth has no effect on it. This is a satisfactory outcome to the extent to boost growth will have a significant impact on inflation; it will still increase lending to the economy. It is well noticed that there are still many opportunities available in terms of financing loans to run towards the objectives of growth and hence welfare of the people. Passed credits negatively and significantly affects inflation, since most loans are short term loans with high interest rates in Cameroon. Inflation lagged one period has a negative and significant effect on the current inflation rate. This result is satisfactory to the extent that past inflation increase current inflation in the short term. This is advantageous because in this case it is sure to increase funding in order to seek growth, stable framework, in order to increase growth in the long run. This is possibly the reason why Cameroon operates a fixed exchange rate regime with some western currencies.

The coefficients of determination are 0.32, 0.19 and 0.43 respectively for the variables growth, credit to the economy and inflation. They are all relatively small, but they do not have great importance for the objective of this exercise is to check the combined effects of the three variables. It was necessary for sacrificing the presence of other explanatory variables such as exchange rate, interest rate and many others.

For model appropriateness, autocorrelation is absent as shown by the Langrange-multiplier test. Both at lag 1 and 2, the probabilities of 0.28 and 0.23 are all greater than the critical test statistics of 1%, 5% and 10%. Our VAR model equally satisfies stability condition since using the Eigen value stability test, all the eigenvalues lie inside the unit circle.

V. Conclusion

Our study aimed at determining the joint effects of the credit to the economy, inflation and growth in Cameroon. We opted for two objectives stated as follows: To determine whether the three variables granger causes each other in Cameroon, and to determine the reciprocal joint effects of these three variables in Cameroon.

determine the reciprocal joint effects of these three variables in Cameroon.

We drew some lessons: firstly, inflation causes growth rate which in turn causes the credit to the economy, which in turn causes inflation. Secondly growth is driven upward by the lagged growth and the lagged rate of inflation. Credit to the economy is stimulated to increase by an earlier growth. The inflation rate is driven down by the short term loans and past inflation rates. In a stable economy, short-term variations can be preserved for the benefit of the expected structural changes. The Cameroon fixed exchange rate regime has the advantage of easing economic stability thus permitting to seize the opportunities offered by funding policies or funding requirements. It is hence obvious that a less restrictive monetary policy in an environment where monetary authorities are independent (which would allow more effective action and policy control of the currency) will be a good complement to the fiscal policy for achieving internal balance (full employment equilibrium) and external balance (balance between import and export). It is important to decide on the contribution to the development of various monetary policy instruments that have evolved within the CEMAC sub region.

References Références Referencias

1. Acaravci, S., K. and Ozturk A. I. Acaravci « Finance Growth Nexus: Evidence from Turkey». International Research Journal of Finance and Economics, ISSN 1450-2887, (11), 30-40. (2007).
2. Aiyagari, S.R. et M. Gertler, : « The Backing of Government Bonds and Monetarism », Journal of Monetary Economics, *16*(1), 1985 , juillet.
3. Banque Mondiale, World Development Indicator (2007);
4. Barro R. « Inflation and Economic Growth », Bank of England Quarterly Bulletin, 35, pp. 166-176. (1995).
5. BEAC, Etudes et Statistiques, n° 301, (1992) juil. sept.
6. Bikai J. L., Kamgna Y. S., «Effets de seuils de l'inflation sur l'activité économique en CEMAC», Journées Internationales du Risque, (2011) Niort 25 et 26 Mai.
7. Blix M., «Underlying Inflation: A Common Trend Approach», in Sveriges Rikbank Arbetsrapport, n° 23 (1995).
8. Boissieu C. (de), « Politique monétaire », chapitre 46 de l'Encyclopédie économique, op. cit., tome 2, (1990) pages 1667 à 1705.
9. Bullard, J. et J. W. Keating (1995). « The Long-Run Relationship between Inflation and Output in Postwar Economies », Journal of Monetary Economics, vol. 36, décembre, p. 477-496.
10. Claus I., «A Measure of Underlying Inflation in the United States», in Bank of Canada-Working Paper (1997) Septembre, 97-20.
11. De Gregorio, Jose, and Pablo E. Guidotti Financial Development and Economic growth. Engone S., «la cible d'inflation en zone CEMAC», (2009).
12. Fischer S: « The Role of Macroeconomic Factors in Growth», Journal of Monetary Economics, 32, pp. 485-512. (1993).
13. Fouda O. J., «la surliquidité des banques en zone franc : comment expliquer le paradoxe de la CEMAC ? », in revue africaine de l'intégration. (2009).
14. Friedman, M. « Le rôle de la politique monétaire »,the American economic review,vol.LVIII. ,(1968).
15. Goldsmith, Raymond W.. Financial Structure and Development. New Haven, CT: Yale University Press. (1969).
16. James E. Problèmes monétaires d'aujourd'hui, Paris, 2$^{\text{ème}}$ édition (1970).
17. Kahn, M. and Knight, M. «Stabilization Programs in Developing Countries: A Formal Framework», in Kahn M., Montiel P., Haque N. eds «Macroeconomic Models for Adjustment in Developing Countries», IMF, Washington D.C., (1991). PP. 38-85.
18. Leeper E., « Equilibria under 'Active' and 'Passive' Monetary Policies », in Journal of Monetary Economics , *27*. 1991.
19. Mantsie R. W. «inflation et croissance dans les pays de la CEMAC». (2003).
20. McKinnon R. I. et Shaw « Money and Capital in economic development », The brooking institution, Washington D.C. (1973).
21. Miller, S.M. « Monetary Dynamics: An Application of Co-integration and EC Modeling». In Journal of Money, Credit and Banking, (1991). Vol. 23, pp. 139-154.
22. Modigliani, F. «Life Cycle, Individual Thrift, and the Wealth of Nations», AmericanEconomic Review, v. 76, No. 2, (1986), 1-41.
23. Nubukpo K. «L'efficacité de la politique monétaire de la banque des Etats de l'Afrique de l'Ouest depuis la libéralisation de 1989». (2003).
24. Piger J. « Pushing On A String », Monetary Trends, Federal Reserve of St Louis, March, p.1. (2003).
25. Sarel, M. Nonlinear effects of inflation on economic growth, Staff Papers. IMF Vol 43, No, 1; (1996), March.
26. Shaw, E. S. Financial deepening in economic development. New York: Oxford university Press. (1973).
27. Sidrauski, M. « Rational choice and patterns of growth a Monetary Economy» American Economic Review, 54, (1967), May, pp.534-544.
28. SIMS, C. «Macroeconomics and Reality,» Econometrica, 48, 1–48. 1980.

29. Sims C.A. : « A Simple Model for the Determination of the Price Level and the Interaction of Monetary and Fiscal Policy », Economic Theory, *4*. 1994.

30. Tallman, E.W. and Chandra N. The Information Content of Financial Aggregates in Australia, Reserve Bank of Australia, Research Discussion Paper No. 9606,(1996).

31. Tobin J. « Money and Economic Growth», *Econometrica* 33 (October): 671–84. (1965).

32. Woodford M. : « Doing Without Money : Controlling Inflation in a Post-Monetary World » ; NBER Working Paper n° 6 188, (1997) September.

33. Woodford M. «Price-Level Determinacy Without Control of a Monetary Aggregate», Carnegie-Rochester Conference Series on Public Policy, *43*, 1995, December.

Appendices

1. Adf Test At Level Form

Null Hypothesis: TPIBR has a unit root
Exogenous: Constant
Lag Length: 4 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.681718	0.1081
Test critical values:	1% level	-3.600987	
	5% level	-2.935001	
	10% level	-2.695836	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: TPIBR has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 4 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.151295	0.10170
Test critical values:	1% level	-4.198503	
	5% level	-3.523623	
	10% level	-3.192902	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: CE has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-1.038059	0.7316
Test critical values:	1% level	-3.584743	
	5% level	-2.928142	
	10% level	-2.602225	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: CE has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-1.561100	0.7925
Test critical values:	1% level	-4.175640	
	5% level	-3.513075	
	10% level	-3.186854	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: TINFL has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.762106	0.0003
Test critical values:	1% level	-3.584743	
	5% level	-2.928142	
	10% level	-2.602225	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: TINFL has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.589975	0.0002
Test critical values:	1% level	-4.175640	
	5% level	-3.513075	
	10% level	-3.186854	

*MacKinnon (1996) one-sided p-values.

2.   ADF Test at First Difference

Null Hypothesis: D(TPIBR) has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 1 (Automatic   based on SIC, maxlag=9)
                              -

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-9.428057	0.0000
Test critical values:	1% level	-4.192337	
	5% level	-3.520787	
	10% level	-3.191277	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(TPIBR) has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-9.562923	0.0000
Test critical values:	1% level	-3.596616	
	5% level	-2.933158	
	10% level	-2.604867	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(CE) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.085948	0.0001
Test critical values:	1% level	-3.588509	
	5% level	-2.929734	
	10% level	-2.603064	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(CE) has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.072350	0.0009
Test critical values:	1% level	-4.180911	
	5% level	-3.515523	
	10% level	-3.188259	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(TINFL) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-10.20755	0.0000
Test critical values:	1% level	-3.588509	
	5% level	-2.929734	
	10% level	-2.603064	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(TINFL) has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-10.14002	0.0000
Test critical values:	1% level	-4.180911	
	5% level	-3.515523	
	10% level	-3.188259	

*MacKinnon (1996) one-sided p-values.

3. Vector Autoregressive Estimate

```
Sample:  1968 - 2010                          No. of obs   =         43
Log likelihood = -145.0771                    AIC          =   7.724516
FPE        =  .4582468                         HQIC         =   8.041702
Det(Sigma_ml)  =  .1710397                     SBIC         =   8.584637
```

Equation	Parms	RMSE	R-sq	chi2	P>chi2
D_tpibr	7	.049128	0.3219	20.41691	0.0023
D_ce	7	2.59772	0.1871	9.895133	0.1291
D_tinfl	7	5.06983	0.4252	31.81346	0.0000

	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
D_tpibr						
tpibr						
LD.	.4741511	.1664375	2.85	0.004	.1479396	.8003626
L2D.	-.0283264	.1667748	-0.17	0.865	-.355199	.2985463
ce						
LD.	.0031546	.0027583	1.14	0.253	-.0022516	.0085608
L2D.	.0029291	.002895	1.01	0.312	-.0027449	.0086031
tinfl						
LD.	.003456	.0015223	2.27	0.023	.0004724	.0064396
L2D.	.0033205	.0012282	2.70	0.007	.0009134	.0057277
_cons	.0077952	.0069748	1.12	0.264	-.0058752	.0214656

```
               ──────────────────────────────────────────────────────────────────
D_ce
      tpibr
        LD.   -.2724753   8.800645   -0.03   0.975   -17.52142   16.97647
       L2D.    19.48561   8.818482    2.21   0.027    2.201699   36.76951

         ce
        LD.    .1933099     .14585    1.33   0.185   -.0925509   .4791707
       L2D.   -.1554603   .1530758   -1.02   0.310   -.4554835   .1445628

      tinfl
        LD.   -.0671074   .0804928   -0.83   0.404   -.2248705   .0906556
       L2D.    .0382486   .0649404    0.59   0.556   -.0890322   .1655294

      _cons   -.2207088   .3688049   -0.60   0.550   -.943553    .5021355
               ──────────────────────────────────────────────────────────────────
D_tinfl
      tpibr
        LD.     13.8462   17.17573    0.81   0.420    -19.8176   47.51001
       L2D.    2.033827   17.21054    0.12   0.906    -31.6982   35.76586

         ce
        LD.   -.8600464   .2846473   -3.02   0.003   -1.417945   -.302148
       L2D.    .3484167   .2987495    1.17   0.244   -.2371216   .933955

      tinfl
        LD.   -.3988222   .1570933   -2.54   0.011   -.7067195   -.090925
       L2D.   -.2218823   .1267405   -1.75   0.080   -.4702892   .0265246

      _cons   -.6386001   .7197758   -0.89   0.375   -2.049335   .7721344
               ──────────────────────────────────────────────────────────────────
.
```

4. Optimum Lag Selection, Causality Test and Autocorrelation Test

```
. varsoc

  Selection-order criteria
  Sample:  1968 - 2010                          Number of obs      =       43
  ┌──────────────────────────────────────────────────────────────────────────┐
  │ lag │    LL       LR     df    p     FPE      AIC      HQIC      SBIC       │
  ├──────────────────────────────────────────────────────────────────────────┤
  │  0  │ -172.793                       .713789  8.17644  8.22175   8.29931   │
  │  1  │  -154.48   36.627   9  0.000   .463588  7.74325  7.9245*   8.23475*  │
  │  2  │ -145.077   18.806*  9  0.027   .458247* 7.72452* 8.0417    8.58464   │
  └──────────────────────────────────────────────────────────────────────────┘

  Endogenous:  D.tpibr D.ce D.tinfl
   Exogenous:  _cons

 . vargranger

   Granger causality Wald tests
  ┌──────────────────────────────────────────────────────────────┐
  │    Equation          Excluded  │  chi2     df  Prob > chi2    │
  ├──────────────────────────────────────────────────────────────┤
  │    D_tpibr               D.ce  │  2.9662    2    0.227        │
  │    D_tpibr             D.tinfl │  10.085    2    0.006        │
  │    D_tpibr                ALL  │  13.6      4    0.009        │
  ├──────────────────────────────────────────────────────────────┤
  │      D_ce             D.tpibr  │  6.3014    2    0.043        │
  │      D_ce             D.tinfl  │  1.359     2    0.507        │
  │      D_ce                ALL   │  6.8221    4    0.146        │
  ├──────────────────────────────────────────────────────────────┤
  │    D_tinfl            D.tpibr  │  .98938    2    0.610        │
  │    D_tinfl               D.ce  │  9.4092    2    0.009        │
  │    D_tinfl               ALL   │  9.5927    4    0.048        │
  └──────────────────────────────────────────────────────────────┘

 . varlmar
```

52

```
Lagrange-multiplier test
```

lag	chi2	df	Prob > chi2
1	10.9456	9	0.27946
2	11.6439	9	0.23414

```
H0: no autocorrelation at lag order
```

5.   Stability and Normality Tests

```
. varstable
```

Eigenvalue stability condition

Eigenvalue	Modulus
.7158797	.71588
-.2256031 + .5493089i	.593833
-.2256031 - .5493089i	.593833
.2319384 + .5052626i	.555955
.2319384 - .5052626i	.555955
-.4599116	.459912

```
All the eigenvalues lie inside the unit circle.
VAR satisfies stability condition.
```

```
. varnorm, jbera skewness kurtosis
```

Jarque-Bera test

Equation	chi2	df	Prob > chi2
D_tpibr	3.992	2	0.13591
D_ce	267.477	2	0.00000
D_tinfl	0.705	2	0.70310
ALL	272.173	6	0.00000

Skewness test

Equation	Skewness	chi2	df	Prob > chi2
D_tpibr	-.35739	0.915	1	0.33869
D_ce	-2.8422	57.894	1	0.00000
D_tinfl	-.30633	0.673	1	0.41218
ALL		59.482	3	0.00000

Kurtosis test

Equation	Kurtosis	chi2	df	Prob > chi2
D_tpibr	4.3103	3.076	1	0.07945
D_ce	13.816	209.583	1	0.00000
D_tinfl	2.8664	0.032	1	0.85806
ALL		212.691	3	0.00000

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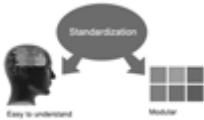
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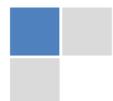
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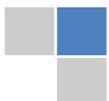
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"
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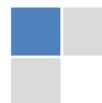
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(i) References in the proper form.

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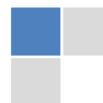
The Editorial Board reserves the right to make literary corrections and to make suggestions to improve briefness.

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.
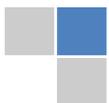
Key Words

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.

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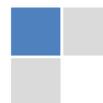
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Upon approval of a paper for publication, the manuscript will be forwarded to the dean, who is responsible for the publication of the Global Journals Inc. (US).

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(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.

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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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

26. Go for seminars: Attend seminars if the topic is relevant to your research area. Utilize all your resources.
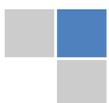
27. Refresh your mind after intervals: Try to give rest to your mind by listening to soft music or by sleeping in intervals. This will also improve your memory.

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

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

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

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

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

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

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

## INFORMAL GUIDELINES OF RESEARCH PAPER WRITING

Key points to remember:

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

Final Points:

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

The introduction will be compiled from reference matter and will reflect the design processes or outline of basis that direct you to make study. As you will carry out the process of study, the method and process section will be constructed as like that. The result segment will show related statistics in nearly sequential order and will direct the reviewers next to the similar intellectual paths throughout the data that you took to carry out your study. The discussion section will provide understanding of the data and projections as to the implication of the results. The use of good quality references all through the paper will give the effort trustworthiness by representing an alertness of prior workings.
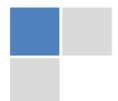
Writing a research paper is not an easy job no matter how trouble-free the actual research or concept. Practice, excellent preparation, and controlled record keeping are the only means to make straightforward the progression.

General style:

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

To make a paper clear

· Adhere to recommended page limits

Mistakes to evade

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

In every sections of your document

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

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

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

· Align the primary line of each section

· Present your points in sound order

· Use present tense to report well accepted

· Use past tense to describe specific results

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

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

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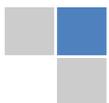
Abstract:

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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 <u>definite statistics</u> - if the consequences are quantitative in nature, account quantitative data; results of any numerical analysis should be reported
- Significant conclusions or questions that track from the research(es)

Approach:

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

Introduction:

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

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

Approach:

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

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

Procedures (Methods and Materials):

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

Materials:

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

Methods:

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

Approach:

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

What to keep away from

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

Results:

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

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

Content

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

What to stay away from

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

Approach

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

Figures and tables

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

Discussion:

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

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

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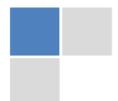
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