

Volume 4, Issue 6 – December 2016

ISSN: 2054-7404



ARCHIVES OF BUSINESS RESEARCH



SOCIETY FOR SCIENCE AND EDUCATION - UNITED KINGDOM

TABLE OF CONTENTS

EDITORIAL ADVISORY BOARD	I
DISCLAIMER	II
Effects of Human Resources Training on Employee Perceived Performance: Comparison of Somalia-Turkiye Telekommunication Bussinesses Burhan Abdullahi HUSSEIN Ebru AYKAN	01
Downstream Stockpiling of Steel Inventories and Artificial Demand: The Case of Saudi Arabia Dr. Fadye S. AlFayad	16
Capital Structure and Firm Performance in the Nigerian Cement Industry EL-Maude, Jibreel Gambo Abdul-Rahman Ahmad Ahmad, Mohammed Musa	30
Revisiting the Financial Year in India Asit Ranjan Mohanty Avipsa Mohanty	45
Investigate Students' Attitudes toward Computer Based Test (CBT) at Chemistry Course Amnah Hassan Dammas	58
Human Capital, HRM Practices and Organizational Performance in Pakistani Construction Organizations: The Mediating Role of Innovation Huma Sarwar Bilal Khan Kashif Nadeem Junaid Aftab	72
Matter's Influence Child's On the Speech Development in Kenya Manson Sichari	83
The Undergraduate College Education in USA: Schools with Best and Worst ROI Raj K. Kohli	92
Developing Sustainable Special Economic Zones in Botswana: A Conceptual Discussion Edward E. Marandu Donatus Amanze	101

Experimental Investigation of the Relationship between Knowledge Management and Organizational Innovation and Creativity in the District 5 of Tehran Municipality	112
Mahsa Tavakoli	
Impact of Financial Liberalization and Governance on the Financial Development in Developing Countries	122
Anila Ijaz Alvina Sabah Idrees	
An Integrative Framework Capturing Kyai Charismatic Leadership And Madura Society Welfare Level In East Java - Indonesia.	145
Kuswandi Ujianto Amiartutik Kusmaningtyas	
"The Leather Industry Development in Tanggulangin in Facing Asean Economic Community (AEC) 2015 with Quantitative Strategic Planning Matrix (QSPM)"	153
Drs. Bambang Purwoko Ahmad Gamal, SE, MM Dedy Kunhadi, ST, MM.	
Management Problems of Turkish Businesses in Afghanistan: The Case of Kabul and Mazarisharif	163
Jamshid Khurshid Ebru Aykan	
Academic Publication and Issues of the Day: U.S. Income Tax Paradigm	178
Robert W. Service James P. Reburn	
The Rhetorics of Labour Contracting As a Managerial Tool among Oil Multinational Corporations (MNCs) In Nigeria	209
Hakeem Adeniyi Ajonbadi, Ph.D	
The Impact of Management Objectivity in Jordanian Shareholding Companies on Audit Planning and Evidences Collection	227
Professor Walid Zakaria Siam Ali Arafat Mansour	
Analysis on the Influence of Inflation, Ship's Call, And Unloading Cost towards General Cargo Inter-Insular Ships in Surabaya Port	249
Rosadiro Cahyono	
The Linkage between Psychological Capital and Public Service Motivation: Evidence from Taiwan	260
Chyi-Lu Jang	

Customer Retention Management Strategies Adopted By the Freight Transport Service Sector in Ghana. A Review Paper on Related Literature	267
Isaac Ofori-Okyere Renas Ayebono Atanga	
Managing Lean Principles applicability and implementation in the mining industry in Ghana. A Review Paper on Related Literature.	282
Isaac Ofori-Okyere Renas Ayebono Atanga Bernard Adjetey Okine	
An investigation on the role of Visual Merchandising Displays in the promotion of traditional apparels. An evidence from retailing the Asante Kente apparel in Ghana.	300
Isaac Ofori-Okyere Safo K. Ankama	
Evidence of Monthly Anomalies in Pakistan Stock Exchange	312
Musarrat Shamshir, PhD Mirza Jawwad Baig, PhD Khalid Mustafa, PhD	
Financial Stability Report: Lessons from the Central Banks	325
Filali Adib Fatine Firano Zakaria	
Organizational Climate and Oil Companies. Multidimensional Study with Workers from the Drilling Department in Tabasco, Mexico	340
Carlos de Jesús González López María Del Carmen Sandoval Caraveo Edith Georgina Surdez Pérez	
Key Determinants of Success to Achieve Sustainable Competitive Advantage (SCA)	351
Fatemeh Rezaee Mostafa Jafari	
Remuneration and Management Behavior: A Review	376
Sarah Yuliarini	
Exposure to Entrepreneurial Activities and the Development of Entrepreneurial Culture	384
Christabel Divine Brownson	
Impact of Perceived Discrimination and Resultant Stress on Innovative Work Behavior Moderated By Spirituality among Female Employees in Private Banks of Rawalpindi	389
Samreen Fatima Malik	

Balancing Conflicting Supply Chain Stakeholder Interests: The Big Procurement Practitioner's Dilemma 400

Jackson Ndolo
Eunice Njagi

Presenting an Innovative Approach Combining FA and ANP Methods to Identify and Prioritize Water Pollutants in Petroleum and Petrochemical Industries 405

Abolfazl Rohani
Abbas Keramati
Jafar Razmi

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Effects of Human Resources Training on Employee Perceived Performance: Comparison of Somalia-Turkiye Telecommunication Bussinesses

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Abstract

The present study was conducted to investigate the effects of human resources training on employee perceived performance in telecommunication business and to compare such relations in two businesses operating in Somali and Turkey. The research was conducted on 240 participants employed in a telecommunication organization operating Galkio province of Somali (Golis Telekom) and a telecommunication organization operating in Kayseri province of Turkey (Türk Telekom). Current findings revealed that there were significant relationships between human resources training and perceived performance of employees and human resources training had significant impacts on perceived performance of employees. It was also observed that average training level and performance of Türk Telekom employees were higher than the employees of Golis Telekom and the differences in their training levels and performances were found to be significant.

Key Words: Human Resources Training, Perceived Performance of Employees, Human Resources Management, Training, Performance, Employee

INTRODUCTION

Large companies always target worldwide success and competitive advantage. To reach such targets, they should find and staff quality human resources and have them effectively worked for the organization. They should also keep a close eye on them to keep employees in their organization, to create a sense of commitment and devotion in them. In so doing, managers should pay a special attention to all the core functions of human resources management as they play interdependent roles in organizational, social and economic aspects. All functions of human resources management play a significant role in reaching organizational targets and sustaining the organization in markets.

Organizations today are in continuous economic, technological, social, demographic and legal changes. Compliance with and management of these changes constitutes the bases for survival of organizations and their success in international competition. On the other hand, incompliance with these changes and incapacity in positive response to such changes may result in extinction of the organization. Especially with the end of technology-oriented era and transition to “information” age have altered the significance levels of production tools used by the organizations. Confronting with this new age requires bringing different production tools forward. Among these new production tools, human resources representing humane side of the organization are the most significant one. Change and competition have brought human

resource, once in the bottom, today into the upper most level of organizational pyramid. Human resources provide great contributions to create organization vision and improve organization efficiency and productivity. In current century and information society, human resources and the knowledge they have has a strategic importance for the competitive power of the organizations. Intellectual workers are the most important and the greatest value-added item of information society and they are the provider of competitive advantage in today and in the future. To be on the course of success along the global competition environment, organizations have to improve their human capital and their organizational supports. Manpower is the most important production power improving the success of modern organizations and it is also among the basic items designating the power of an organization. Therefore, employee training and development are quite significant issues in success of operations. Employee training and development is also a significant issue for effective management of changes. Improvement of knowledge, skills, talent and operational level of human resources provide significant contributions to efficiency and performance of human resources. Therefore in this study, significance of training efforts in improving individual and organizational performance was pointed out. From this point of view, initially human resources management, training and development were focused on and then the effects of human resources training on perceived performance of employees were tried to be elucidated.

CONCEPTUAL FRAMEWORK

Human Resource Management and Functions

Human resources management (HRM) is ever-growing and transitional concept. Therefore, it is quite hard to find a standard definition. There aren't any common terminologies especially in transitional sciences (Mathis et al. 1997: 25).

HRM is interested in human-related dimension of an organization. It is a support unit for the performance of organizational functions. The role of human resources management is to provide supports on human resources management to the individuals directly involved in production of goods and services or to the line personnel (Gök 2006: 21). Within this framework in this study, HRM is defined as every kind of function and practice for effective management of human resources in an organizational or environmental ambient as to be beneficial for organization, individual and environment and be within the legal frameworks (Sadullah et al. 2013: 3).

The abundance of definitions is derived from the significance attributed to HRM. Regardless of how robust the other pecuniary sources, if the human resources are not sufficiently effective, the possibility of success of an organization will decrease that much. It is impossible to reach productivity and quality targets with unsatisfied labor force with low achievement motivation. Therefore, HRM has basic objectives of improving the productivity and basic quality of professional life. From this aspect, human resources management tries to provide positive contributions both to productivity and occupational life through using various criteria together with labor force (Tortop et al. 2007: 16).

In organizations, executives are responsible for implementation of HRM functions. Executives are the organs responsible for establishing policies and targets of organizations and for designating the strategies to realize these policies and targets. The success of organization depends on the emphasis put by executives on relevant activities. The functions of HRM can be assessed under the headings of: human resources planning; selection, training and development of human resources; career planning; wage management; occupational health and safety (Ünsalan et al. 2008: 59).

HR managers make plans to supply the organization with sufficient number and desired quality employees in required time through considering the current potential, development process and objectives of the organization (Aykaç 1999: 93). Human resources planning (HRP) is based on systematic analysis of current resources of the organization and commonly used to estimate future HR needs. It also targets efficient use of HR and compliance of estimates with the HR supply of the organization (Özgen et al. 2001: 73).

Personnel procurement is an activity performed to search for personnel candidates with required knowledge, skills, talents and motivation to meet personnel deficit of an organization designated by HRP and to employ them in the organization (Ünsalan et al. 2008: 88). Personnel selection includes a series of processes composed of decision-making activities to select the personnel from the candidate group created through candidate search and finding efforts (Çavdar et al. 2010: 85). Traditional selection process includes; introducing job profile, application form, tests, interviews, reference search, recruitment decision, health inspections, offering and placement (Geylan et al. 2013: 61).

Career planning includes the processes of: assessment of individual's own knowledge, skills, interests, value judgements, strengths and weaknesses; definition of inner-outer organizational career opportunities; identification of short-medium-long term targets; preparation of career plans; implementation of these plans. It is a problem solving and decision making process aiming the most proper correlation between the values and needs of the employees and their professional experiences and opportunities (Çetin and others: 2014: 126).

Wage and salary management is one the most important functions of HRM. A efficient HRM requires a satisfactory monetary reward management because wage and salary or reward management are directly related to other functions of HRM. For an efficient implementation of activity and practices of wage management, a sensitive payment program and policies should be created. On the other hand, a reduction in job satisfaction and more frequent personnel recruitment are observed in organizations without a wage policy. There is a relationship between performance improvement and wage increase and such a relation is the primary factor binding the personnel to the job and the organization. When the relationship between productivity and wages were assessed, labor force productivity can clearly be seen as an important factor. (Parasız 2004: 4).

HRM functions are developed with identification, recruitment, placement and orientation of individuals with desired qualifications and sufficient payment to them. Such functions also require occupational health and safety for preservation and sustainability of physical power, sufficiency and skills of the personnel as it was in the first day of job. Occupational health and safety is a systematic and scientific work for the prevention from health hazards of various sources during the performance of jobs in organizations (Yüksel 2004: 235).

HR assessment is another basic subject of HRM. Task performance of labor force employed in an organization is a quite significant issue in reaching specific targets. Thus, performance assessment is among the important functions of HRM. However, this issue is quite difficult as well as being significant. Such difficulty is originated from subjectivity (varying from one individual to another) of performance assessment (Fındıkçı 2001: 297). In other words, performance assessment is a practice assessing success, attitude, behavior and personality of employees of an organization based on some objective criteria (Yılmaz 2013: 108). The personnel is subjected to performance assessment through knowledge, skills and talents he/she has while recruiting and again subjected to performance assessment for on-job

performance after recruitment. In this way, current status, development and rewards of the personnel are determined with this performance assessment (Ünsalan et al. 2008: 124).

Human Resources Training

There is a continuous need for development efforts to better benefit from the employees. Employee development is achieved through preparation of training programs to improve professional skills, assessment of professional successes and providing consultancy whenever necessary. Rapid developments in technology, mechanization and automation increased the significance of training even more (Yüksel 2004: 198). The need for professional training especially in 21st century increased together with increasing educational levels of people, changes in expectations and needs of each new generation, developments in communication opportunities, advanced technology utilization to meet ever-increasing needs, transition to automation and excessive expertise. Today, organizations well comprehended the significance of developing or improving success of their personnel. In any case, training is not a target to be reached, but only a tool to realize the objectives of the organizations (Bingöl 1990: 147).

Training is the primary HR practice used to increase competitive power of the organization. Without training and development, it is impossible to update knowledge, competency, skill and experiences of employees and improve their performance as to influence their organizational outcomes (Uyargil et al. 2010: 162). There are various definitions for training concept. Training is defined as an effort designed by the organization to ease the comprehension of job-related competencies by the employees (Çetin et al. 2014: 81). Training is also expressed as a series of planned activities able to provide certain developments in human behaviors toward to pre-determined objectives (Sadullah et al. 2013: 165). In another definition, training is expressed as a process for changing and developing behavior, knowledge, skill and motivation of employees (Yilmazer 2013: 132).

Increasing organizational performance through positive changes in human behaviors and in this way ease the compliance of the organization with change and developments are among the most important objectives of training works (Çetin et al. 2014: 83). The benefits of HR training can be gathered under two groups (Bayraktaroğlu 2006: 78; Ertürk 2011: 124; Ayan 2013: 155; Bingöl 2014: 283): With regard to organization; to increase productivity and/or increase productivity consciousness; to increase knowledge, skill and talents of employees; to develop employee-employer relations; to provide adaption and full implementation of organizational policies; to reduce production, management and personnel costs; to reduce personnel resistance to changes; to improve decision-making and problem-solving capability of the organization; to strengthen inter-organizational communication; and to reduce maintenance costs of machinery and tools. With regard to personnel; to improve self-confidence and sense of achievement; to increase communication skills and leadership knowledge; to increase job satisfaction; to realize individual objectives and to satisfy personal requirements; to eliminate the fear of taking new responsibilities; to increase the sense of belonging; to provide career development and increase performance. From this point forth, with training function of organizations, it is possible to improve performance, update skills and knowledge of employees, solve organizational problems, and help in career development and orientation of new comers (Tortop et al. 2007: 185).

Perceived Performance

The primary target of organization in general is to achieve high performance, to preserve and develop their competitive power. While some organizations accept profitability, market share or quality as the performance criteria, some others accept cost, consumer orientation or

productivity as the performance criteria. Performance is a concept defining the outcomes of individuals or groups working in an organization to reach the desired targets (Uysal et al. 2013: 837). It is an indicator to what extent the individuals or groups reached the targets and standards along with the desired objectives. The performance may decrease or increase with personality, values, attitudes and abilities of the individuals (Uysal et al. 2013: 837). Performance may also express the execution level of a task under certain conditions, the behavioral pattern of an employee or the outcomes of personnel in a certain time period (Bingöl 2014: 367). Lexical meaning of performance is accomplishment of a task by an individual, efficient finalization of a task assigned to an individual. In a functional point of view, performance is the level or ratio of accomplishment of a task within the specified standards between the individual and the task (Ertürk 2011: 167).

The common point in several definitions of employee performance is the emergence of performance as a result of the relationship established between individual expectation and organizational objective. Performance is a qualitative and quantitative measure of the efficiency exhibited by an employee, a group or an organization in reaching the targets. For an employee to reach qualitative and quantitative objectives there should be some psychological conditions related to organizational climate. Besides monetary opportunities like wage and career development, an organizational environment should also be provided to realize these objectives (Tutar et al. 2010: 202).

An employee should have a strong morale and motivation to exhibit the performance expected from him. To do this, a well wage and opportunities should be supplied to the employee, supports should be provided for his promotion and an attention, affinity and sincerity should be presented by the other employees. The relevant desire and effort to realize the objective is totally depend on perception of current opportunities and wage and rewards provided by the organization (Uygur 2007: 75).

Organizations use different performance assessment methods. Mostly objective, subjective, qualitative and quantitative methods are employed together for performance assessment. To measure qualitative and quantitative performance, the measurement or assessment made by the executives by asking "to what extent the organization is successful with regard to various performance criteria" through comparisons with the other businesses in the sector is expressed as perceived performance (Aksoylu et al. 2013: 1008).

Business outcomes are sometimes used to measure direct performance. In cases where objective measurement of individual business outcomes is impossible or quite difficult, perceived performance is used as an alternative measure of performance (Mustapha et al. 2013: 22).

In general, there are two dimensions of performance concept. These are "task performance" and "contextual performance" (Onay 2011: 590). Task performance is defined as the actions presented by the employees within the frame of business responsibilities providing technological supports to basic activities of the organization or providing source, material or service to these basic activities (Ünlü et al. 2011: 184). Contextual performance includes various activities like knowledge of employee about organizational rules and procedures, obeying them even they are contrary to own opinions, helping to others in the organization, provide contributions to organizational objectives and presenting an extra effort for the completion of the business (Onay 2011: 590). In other words, contextual performance in broader perspective, besides central activities of the organization, points out the activities enriching organizational, social and psychological ambient of business atmosphere (Ünlü

others 2011: 185). In short, while task performance includes the business-related behaviors of the individual, contextual performance mostly includes voluntary activities apart from the activities specified in business definition.

LITERATURE REVIEW

Current literatures revealed that the global competition in recent years highly influenced the organizations and the ones invested on employee training had competitive advantage over the others. It was pointed out in many studies that training influenced the performance of employees. According to Aydınli and Halis (2004), training plays a significant role in efficient participation of employees in all organizational activities and creates well relationships between employees and employers. With training, employees perform their business successfully, increase their self-confidence and create the bases for their career development. According to Garcia (2005), training has positive effects on business performance. Training also plays a significant role in improving the productivity of employees. It was also reported that besides direct impacts on performance of employees, training also influenced the performance of organization through the performance of employees. According to Truit (2011), employee training increases entrepreneurship and creativity of labor force, provide support in prevention of wear of human resources because of difficulties experienced in compliance with technological changes and variations in ages and attitudes of the employees. Training also improves the performance of employees through job satisfaction during the knowledge, skill and attitude development processes.

According to Kaptangil (2012), continuous development and sustainability of training activities and an efficient organizational structure are necessary for compliance of organizations with changing environmental conditions and survive under these conditions.

Shahen et al (2013) indicated the most important effects of training on performance of employees and organization as; increased product quality and quantity, improved profit ratios, sustained business stability, minimized risks, decreased organization expenses and production costs, improved business management, compliance with national and international standards.

Elnaga and Imran (2013) in a study pointed out that sufficiency levels of employees may be improved with training programs. Then, it was stated that trainings not only improve the performance and thus the success of employees, but also improve their knowledge levels, let them gain experience for their future businesses and allow them more regular job performance.

Falola et al. (2014) indicated that efficient professional training programs positively influenced the development of employees and based on the level of training program, improved individual and organizational efforts to reach desired targets and increased the performance of employees. Similarly according to Bayraktaroğlu and Cickusic (2014), in case of well-trained employees, the management can assign them full trust and responsibility to reach the success. Well trained employees also use business resources more efficiently and productively.

Right at this point, constituting the basis of this study, apart from targeted objectives, effects of training programs provided to employees are closely related to what extend education, development and learning concepts were realized (Aydınli and Halis, 2004: 8).

METHODOLOGY

Sample

The research sample was composed of the employees of Golis Telekom operating in communication sector of Somali and Türk Telekom operating in the same sector of Turkey. Golis Telekom (Galkio) has 300 employees. Türk Telekom (Kayseri) has about 400 employees. Therefore, 300 questionnaires were distributed to Golis Telekom and Türk Telekom. Then, 112 responds were received from Golis Telekom and 5 of them were excluded for various reasons; 152 responds were received from Türk Telekom and 19 of them were excluded for some mistakes. So, from both organizations, 240 questionnaire forms (Golis-107, Türk-133) were assessed.

Data Gathering Method

Questionnaire method was used to gather data. The questionnaire forms were composed of three sections. The first section was composed of statements toward to demographic characteristics of respondents, second section was composed of statements toward to "HR training received by the employees", and third section was composed of the statements toward to "business performance composed of perceived task and contextual performance". Training scale was created by using the previous literature (Rahaib et al, 2011; Laing et al., 2009; Appiah and Benedicta, 2010; Nassazi and Aidah, 2013) and included 22 statements.

To measure business performance (composed of perceived task and contextual performance), the scale developed by Goodman and Svyantek (1999) and including 22 statements was used. While 9 statements of the scale were indicating task performance, 13 statements indicated contextual performance. Respond to each statement was received in 5-point likert format in which "Strongly disagree (1), Disagree (2), Undecided (3), Agree (4) and strongly agree (5)". Cronbach Alpha values indicating reliability of the scales are provided in Table 1.

Table 1. Cronbach Alpha (α) Coefficients for reliability of the scales

	Golis Telekom	Türk Telekom
HR Training	0.948	0.923
Perceived Task Performance	0.900	0.858
Perceived Contextual Performance	0.891	0.700

Research Model and Hypotheses

The model developed in accordance with the research objective and possible relationships are presented in Figure 1.

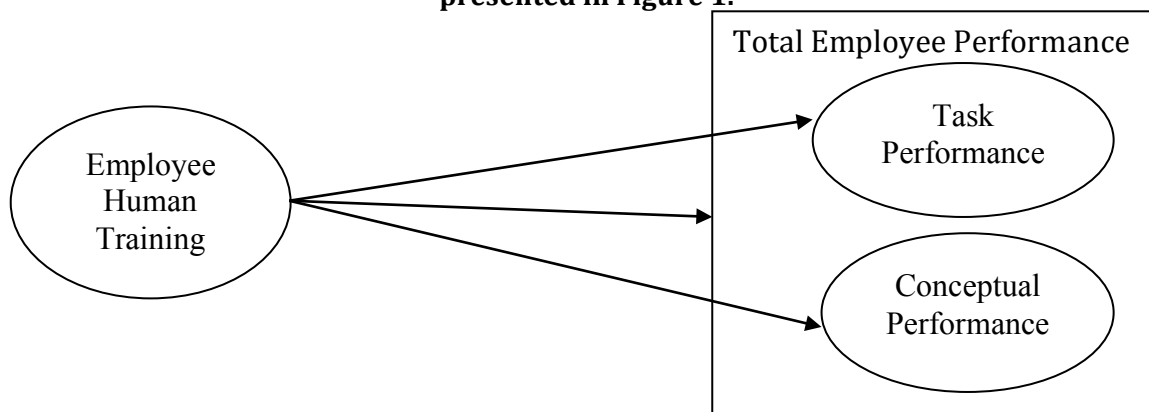


Figure 1. Research Model

The basic hypothesis of this study was “HR training level positively influenced the perceived performance of employees”. Correspondingly, the following hypotheses were created in this study:

H1a: HR training level has a positive effect on perceived task performance of Golis Telekom employees.

H1b: HR training level has a positive effect on perceived task performance of Türk Telekom employees.

H2a: HR training level has a positive effect on perceived contextual performance of Golis Telekom employees.

H2b: HR training level has a positive effect on perceived contextual performance of Türk Telekom employees.

H3: There are differences between HR training levels of Golis Telekom and Türk Telekom organizations.

H4: There are differences between perceived task performance of Golis Telekom and Türk Telekom employees.

H5: There are differences between perceived contextual performance of Golis Telekom and Türk Telekom employees.

RESULTS

Demographic Characteristics

Table 2. Demographic Characteristics, Frequency and Percentages

Gender	Golis Telekom		Türk Telekom	
	Number	Percentage	Number	Percentage
Male	101	94.4	122	91.7
Female	6	5.6	11	8.3
Total	107	100	133	100
Age				
Between 18-27 years	30	28	16	12
Between 28-37 years	54	50.5	89	66.9
Between 38-47 years	18	16.8	19	14.3
Between 48-57 years	5	4.7	9	6.8
Total	107	100	133	100
Education				
Primary school	2	1.9	-	-
Secondary school	3	2.8	16	12
High school	27	25.2	56	42.1
Undergraduate	63	58.9	54	41
Graduate	12	11.2	7	5.3
Total	107	100	133	100

As it was seen from Table 2, 94.4% of Golis Telekom employees were male and 5.6% were female; 91.7% of Türk Telekom employees were male and 8.3% were female. Majority of employees were between 28-37 years of age. While about 73% of Golis Telekom respondents were married and 27% were single, 78.2% of Türk Telekom employees were married and 27%

were single. Of Golis Telekom employees, 25.2% had high school, 58.9% undergraduate education. Of Türk Telekom employees, 42.1% had high school and 41% undergraduate education.

Mean Values of Research Variables

Table 3: Mean and Standard Deviations for Dependent and Independent Variables of Golis Telekom Employees

	N	\bar{X}	SS	Min.	Max.
HR Training	107	3.3037	0.85327	1.23	5
Perceived Task Performance	107	4.0062	0.78654	0.78	5
Perceived Contextual Performance	107	3.8382	0.76857	1.31	5

It was seen in Table 3 that arithmetic mean of "HR training level" of research participants was at medium level ($\bar{X}=3.30$); arithmetic mean for "perceived task performance" was ($\bar{X}=4.00$), arithmetic mean for "perceived contextual performance" was ($\bar{X}=3.83$).

Table 4. Mean and Standard Deviations for Dependent and Independent Variables of Türk Telekom Employees

	N	\bar{X}	SS	Min.	Max.
HR Training	133	3.7874	0.58144	2	5
Perceived Task Performance	133	4.1671	0.51131	2.11	5
Perceived Contextual Performance	133	3.9977	0.40383	2.15	4.77

It was seen in Table 4 that arithmetic mean for "HR training level" of research participants was ($\bar{X}=3.78$); arithmetic mean for "perceived task performance" was ($\bar{X}=4.16$), arithmetic mean for "perceived contextual performance" was ($\bar{X}=3.99$). When two organizations were compared, it was observed that HR training, perceived task performance and perceived contextual performance levels of Türk Telekom employees were higher than that of Golis Telekom employees.

Hypothesis Testing

Whether or not there are relationships between the independent variable HR training and dependent variables task performance and contextual performance, if so the strength and direction of relationship were analyzed with correlation and regression analysis.

Correlation Analysis

Correlation coefficients indicating the relationships between the variables and direction of relationships are provided in Table 5.

Table 5. Correlation Matrix for Golis Telekom Employees

	1	2	3
1. HR Training	1		
2. Task Performance	,368*	1	
3. Contextual Performance	,236*	,814*	1

** $p < 0.01$ level (2-tailed), * $p < 0.05$ level (2-tailed).

As it was seen in Table 5 for Golis Telekom employees, pearson correlation analysis revealed significant positive and weak correlations of HR training level with perceived task performance ($p < 0.01$; $r = 0.368$) and contextual performance ($p < 0.01$; $r = 0.236$).

Table 6. Correlation Matrix for Türk Telekom Employees

	1	2	3
1. HR Training	1		
2. Task Performance	,329** .001	1	
3. Contextual Performance	,379** .000	,763** .000	1

****p < 0.01 level (2-tailed), *p < 0.05 level (2-tailed).**

As it was seen in Table 6 for Türk Telekom employees, pearson correlation analysis revealed significant positive and weak correlations of HR training level with perceived task performance ($p < 0.01$; $r = 0.329$) and contextual performance ($p < 0.01$; $r = 0.379$).

Regression Analysis

Regression analysis was performed to determine the level of relationships among the variables identified with the correlation analysis. Regression results for Golis Telekom employees are provided in Table 6.

Table 7. Effects of HR training Level on Task, Contextual Performance of Golis Telekom Employees

Dependent Variable	Independent Variable (HR Training)			Dependent Variable	Independent Variable (HR Training)		
	B	t	P		Contextual Performance	B	t
Task Performance	0.368	4.05	0.00		0.236	2.48	0.01
R ²		0.136		R ²		0.056	
Adjusted R ²		0.127		Adjusted R ²		0.047	
F		16.471		F		6.186	

p < 0.00, p < 0.01

As it can be seen from Table 7, the regression models created were found to be significant. Regression analysis revealed that HR training level positively affected perceived task performance of Golis Telekom employees ($\beta = 0,368$; $P < 0.001$). The variable HR training level was able to explain 12.7% of total variation in perceived task performance of employees ($R^2 = 0,136$; $\Delta R^2 = 0,127$; $F = 16.471$; $P < 0.001$). Based on this result, the hypothesis H1a "HR training level has a positive effect on perceived task performance of Golis Telekom employees" was supported. Similarly, the HR training level positively influenced perceived contextual performance of Golis Telekom employees ($\beta = 0,236$; $P < 0.001$). HR training level of employees was able to explain 4.7% of the variation in perceived contextual performance of employees ($R^2 = 0,056$; $\Delta R^2 = 0,047$; $F = 6.186$; $P < 0.001$). Along with these results, the hypothesis H2a was also supported.

The results of simple linear regression analysis performed to determine the effects of HR training level on task, contextual and total performance of Türk Telekom employees are provided in Table 7.

Table 8. Effects of HR training Level on Task, Contextual Performance of Türk Telekom Employees

Dependent Variable	Independent Variable (HR Training)			Dependent Variable	Independent Variable (HR Training)		
Task Performance	B	t	P	Contextual Performance	B	t	P
	0.329	3.99	0.00		0.379	4.69	0.00
R ²		0.108		R ²		0.144	
Adjusted R ²		0.102		Adjusted R ²		0.137	
F		15.942		F		22.030	

p<0.00

The regression models created were found to be significant (Table 8). Regression analysis revealed that HR training level positively affected perceived task performance of Türk Telekom employees ($\beta=0,329$; $P<0.001$). The variable HR training level was able to explain 10.2% of total variation in perceived task performance of employees ($R^2=0,108$; $\Delta R^2=0,102$; $F=15.942$; $P<0.001$). Based on this result, the hypothesis H1b "HR training level has a positive effect on perceived task performance of Türk Telekom employees" was supported. Also, the HR training level positively influenced perceived contextual performance of Türk Telekom employees ($\beta=0,379$; $P<0.00$). HR training level of employees was able to explain 13.7% of the variation in perceived contextual performance of employees ($R^2=0,144$; $\Delta R^2=0,137$; $F=22.030$; $P<0.00$). Along with these results, the hypothesis H2b was also supported.

Difference Analyses

A t-test was performed to put forth the differences in HR training levels, perceived task and contextual performance and total performance of Golis Telekom and Türk Telekom employees. Results of t-test are summarized in Table 9.

The average for HR training level of Golis Telekom employees was ($\bar{X}=3.30$) and average for HR training level of Türk Telekom employees was ($\bar{X}=3.78$). The difference in group averages were found to be significant ($p=0.00<0.05$). Based on this finding, the hypothesis H3 (There are differences between HR training levels of Golis Telekom and Türk Telekom organizations) was supported. In other words, the HR training level of Türk Telekom employees was significantly higher than the HR training level of Golis Telekom employees.

Table 9. The Differences in HR Training Levels, Perceived Task and Contextual Performance of Golis and Türk Telekom Employees.

Dimensions	Organization	N	\bar{X}	SS	t	P
Training Levels	Golis Telekom(Somali)	107	3.3037	0.85327	-	.00*
	Türk Telekom(Turkey)	133	3.7874	0.58144	5.003	
Perceived Task Performance	Golis Telekom(Somali)	107	4.0062	0.78654	-	.01**
	Türk Telekom(Turkey)	133	4.1671	0.51131	1.827	
Perceived Contextual Performance	Golis Telekom(Somali)	107	3.8382	0.76857	-	.00*
	Türk Telekom(Turkey)	133	3.9977	0.40383	1.941	

Significant at *p<0.00, ** p<0.01

The difference in perceived task performance of Golis Telekom and Türk Telekom employees were found to be significant ($P=0.011<0.05$). The average for perceived task performance of Golis Telekom employees was ($\bar{X}=4.00$) and the average for perceived task performance of Türk Telekom employees was ($\bar{X}=4.16$). Thus, the hypothesis H4 (There are differences between perceived task performance of Golis Telekom and Türk Telekom employees) was supported ($p=0.000<0.05$).

The average for perceived contextual performance of Golis Telekom employees was ($\bar{X}=3.83$) and the average for perceived contextual performance of Türk Telekom employees was ($\bar{X}=3.99$). The t-test revealed that the difference in perceived contextual performance of Golis and Türk Telekom employees was found to be significant ($p=0.000<0.05$). Based on this finding, the hypothesis H5 (There are differences between perceived contextual performance of Golis Telekom and Türk Telekom employees) was supported.

CONCLUSION AND RECOMMENDATIONS

The effects of human resources training levels on perceived performance of the employees of telecommunication organizations operating in Somali (Golis Telekom) and Turkey (Türk Telekom) were investigated in this study. A total of 240 employees participated and 107 of them were from Golis Telekom and 133 were from Türk Telekom.

Since communication sector is a labor-intensive sector, labor force is among the most significant assets of the organizations. Together with the concept of globalization, number of people involved in communication activities worldwide will rapidly increase and the sector will rapidly grow. Human resources are the most significant input influencing this growth and development. Organizations tend to provide trainings to their employees and keep them in their organizations along with their objectives to survive under increased competitive conditions. The primary objective of this study was to investigate the effects of human resources training on perceived performance of employees and to put forth whether or not such training differs from one country to another.

The t-tests revealed the average for HR training level of Golis Telekom employees as ($\bar{X}=3.30$) and HR training level of Türk Telekom employees as ($\bar{X}=3.78$). The difference between group averages were found to be significant ($p=0.000<.00$). It means, average training level of Türk Telekom employees was higher than the training level of Golis Telekom employees. If the educational level has positive impacts on employee performance, it is expected that performance of Türk Telekom employees should be higher than the performance of Golis Telekom employees. The average for perceived task performance of Golis Telekom employees was ($\bar{X}=4.00$) and average for perceived task performance of Türk Telekom employees was ($\bar{X}=4.16$). The difference was found to be significant, in other words Türk Telekom employees had higher level perceived task performance than the Golis Telekom employees. A similar case was also observed for perceived contextual performance. The average for perceived contextual performance of Golis Telekom employees was ($\bar{X}=3.83$) and the average for perceived contextual performance of Türk Telekom employees was ($\bar{X}=3.99$) and such a difference was also found to be significant.

Pearson correlation analysis revealed significant positive but weak correlation of HR training level of Golis Telekom employees with their perceived task performance ($p<0.01$; $r=0.368$) and contextual performance ($p<0.01$; $r=0.236$). Similarly, it was observed that there was significant positive but weak correlations of HR training levels of Türk Telekom employees with their perceived task performance ($p<0.01$; $r=0.329$) and contextual performance ($p<0.01$; $r=0.379$).

In other words, there were positive correlations between training levels and performance levels of employees in both countries. These outcomes are supported by previous theoretical and practical studies. Thusly, Bartel (1994), Knoke and Kalleberg (1994), Huselid (1995), Thomas (1997) and Armstrong (2010) reported significant correlations between human resources training and employee performance.

Following regression analysis revealed that training levels positively influenced performance levels. According to regression analysis, it was observed that HR training level of Golis Telekom employees positively influenced their perceived task performance ($\beta=0.368$; $p<0.001$) and contextual performance ($\beta=0.236$; $p<0.001$). Similarly, HR training level of Türk Telekom employees positively influenced their perceived task performance ($\beta=0.329$; $p<0.001$) and contextual performance ($\beta=0.379$; $p<0.00$). Then, the proposed hypotheses of the research were accepted. Such findings comply with the results of previous studies carried out in different countries. Trainings had positive effects on employee performance in transportation organizations of Tanzania (Jagero et al., 2012), Banking organizations of Nigeria (Falola et al., 2014), telecommunication organizations of Pakistan (Sultana et al., 2012), public organizations of Zimbabwe (Dabale et al., 2014), pharmacy organizations of Pakistan (Hafeez and Akbar, 2015), commercial organizations of Bosnia-Herzegovina (Bayraktaroğlu and Cickusic, 2014), health organizations of Kenya (Onyango and Wanyoike, 2014) and sugar factory (Otuko et al., 2013), small businesses of Malesia (Raghavan and Mahmood, 2015), various businesses of Turkey (Kaptangil, 2012) and lodging organizations of Spain (Ubeda-Garcia et al., 2013).

As it was supported by the previous literature, the training provided to employees of an organization improved their perceived performance. Such a finding was proved for both Türk Telekom and Golis Telekom. The positive impacts of training on performance will be pointed out more in the upcoming years. Organizations are ever-developing today and they need to have flexible approaches to comply with ever-changing environmental and external conditions. Right at this point, human resources training emerges. Organizations pre-determine the needs for every kind of knowledge, experience, behavior, attitude, decision making and habits and design their training activities accordingly. The knowledge gained through these training activities will then reflect as improved performance for the organization.

Innovation capability will be the primary condition for sustainable competitive advantage of organizations. To create a difference, managements should exhibit more proactive management. To reach success in this management style, they should well keep up with ever-changing environmental conditions and be also to guess new conditions ahead. In so doing, employee training comes in the first place.

Training activities should continuously be developed, sustainability should be provided and efficient organizational structure should be created for compliance of the organization with changing conditions and to survive in competitive markets. However, training activities along with the needs of the organization can reach the success only with the encouragement and sustainability of these training activities. Especially in Somali, just because of long-lasting civil war, companies were not able pay sufficient attention to human resources. Golis Telekom has a private and Türk Telekom has a semi-public semi-private status. Such a case brings Türk Telekom employees into more advantageous (with regard to training, salary, security and etc. issues) position. Private status of Golis Telekom and special conditions of the country resulted in insufficient attention to human resources. Therefore, it was recommended that a separate training section should be established in Golis Telekom, trainings and salaries should be increased and a budget should be allocated to social security and similar activities of the employees.

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Downstream Stockpiling of Steel Inventories and Artificial Demand: The Case of Saudi Arabia

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Abstract

This research study has analyzed how downstream stockpiling within the steel industry and its supply channel actually disrupts the efficiency of the supply chain. The premise upon which this study has been approached is one that states that such downstream stockpiling tends to create artificial demand both upstream in the supply chain and in the marketplace. This subject is examined within the context of the Saudi Arabia steel industry and how this type of phenomenon resulted in steel shortages within the Saudi steel market. The study's data found that the Saudi steel market is expected to expand at a compound annual growth rate (CAGR) of some 11.7% over the next several years. Furthermore, Saudi Arabia has experienced a number of periods of shortages in the supply of steel products. These steel shortages were shown to have resulted in spikes in the price of the commodity for supply chain participants and consumers. The data and information in this study all support the notion that a certain amount of volatility within Saudi Arabia with respect to the steel industry and the supply chain exists. The Kingdom has attempted to compensate for supply chain hoarding and stockpiling by increasing its domestic output which can be utilized to smooth out supply shortages within the supply chain. The study found that the actual result of this rationale in developing buffers is that it quickly transitions into stockpiling. This in turn results in further negative outcomes such as bullwhip effects up and downstream in the supply channel. The information that has been studied revealed that this point at which buffer inventories cross over into what is referred to as hoarding territory can be found through a specific formula. This formula was shown to be the EOQ calculation or the economic order quantity. This calculation utilizes real demand times in the supply chain along with re-ordering costs divided by the product carrying cost to arrive at an accurate figure. In practice, if the EOQ finds that the annual total steel expense exceeds the annual carrying costs for the inventory then there is excessive inventory or stockpiling in the supply chain. The study has also found that the Saudi Arabia supply chain requires a more efficient way to organize the product flow through the entire steel supply chain. This more efficient methodology would be a supply chain that is organized through the fast-moving, slow-moving and non-moving methodology. This methodology ensures that slow-moving steel products like crude steel, flats and galvanized steel are assigned to the slow-moving category and inventory these items at much lower levels.

INTRODUCTION AND OVERVIEW

This research report examines how downstream stockpiling within the steel industry supply channel disrupts the overall supply chain. The premise that this study is approached with argues that such downstream stockpiling tends to create artificial demand in the marketplace.

This topic and chief premise is examined within the context of Saudi Arabia and how this phenomenon resulted in what amounts to steel shortages within the Saudi market. Some reports have indicated that the Saudi steel market is expected to expand at a compound annual growth rate (CAGR) of some 11.7% over the next several years through 2017 at least (Saudi, 2015). Consequently, demand in the Saudi Arabian market for steel already exists in sufficient form to support the health growth of the steel industry.

The premise that this report adopts then which is that downstream stockpiling of steel inventories creates artificial demand, would only aggravate the steel industry. The stockpiling of such inventories occurs within the context of the supply chain for steel in its commodity form. Steel in commodity form typically includes steel ingots, flat sheets, and tubular products as well as finished steel and also scrap steel (de Carvahlo & Sekiguchi, 2015). These various steel products are subsequently re-used within other industries such as construction, product manufacturing and so forth. As stockpiling takes place in downstream supply chain nodes, the end consumers erroneously believe that there are shortages of steel. The resulting increased demand forces steel prices to increase all the way back up the supply chain to the markets of origin.

The Global Steel Industry

The steel industry on a global level is one of the most critical commodities and raw materials market in the world. The price of steel, just as with any item, is ultimately governed by the fundamental factors of supply and demand in the marketplace. Artificial manipulation within the context of these two factors may alter the price of steel resulting in spikes and volatility but these two core factors still determine the character of the steel market. In this regard, demand over the prior several years has been estimated to have increased by some 3-4% because of increased infrastructure buildout throughout many Asia markets and primarily within China (Chen, Yin & Ma, 2014). Of course, once there is demand in other markets, this in turn utilizes increased amounts of supplies that are available in the marketplace. The result is that despite sufficient productivity of steel products, those markets that have greater demand may be willing to pay more for the supply of steel products.

Suppliers will naturally gravitate to the highest paying marketplace regardless of existing supply chain relationships. The result, unless steel producing markets are able to pick up production, is decreasing levels of steel which itself places upward pressure on the price of the commodity. Equilibrium is reached within the steel industry when steel producers perfectly match production with steel demand by the importing markets such as Saudi Arabia. However, there are no perfect markets and the nature of the global supply chain for steel ensures that numerous variables exist which interfere with the efficiency of the market even when production meets demand.

The Steel Industry in Saudi Arabia

The demand for steel within Saudi Arabia is driven primarily by its construction and public services infrastructure projects. Saudi Arabia relies on an economy that is driven by its petroleum industry but the steel industry is the physical expression of this economic framework because construction is what the country does with its petroleum revenues. Recent estimates have placed the Kingdom's overall steel consumption at an approximate 16 million tons annually of which some nine million are produced domestically but even this domestic production relies on the importation of raw materials (Saudi, 2015). Large, public infrastructure projects targeted over the next few years ensures that steel imports will continue to be extremely important for the Kingdom. The result is that the anticipated CAGR for steel consumption is expected to mirror this consumption. Some analysts place this CAGR

estimation in the range of 19.5% but fluctuation in the supply of steel products can affect the final estimate (Saudi, 2015). One segment within the overall steel industry that is believed to mirror this anticipated growth is the segment for long steel products.

These are long steel products such as rebar supplies, steel bars for construction, various wire products and rods for both transportation and construction. The steel industry in Saudi Arabia continues to diversify over time. Over the past decade or so the Saudi government has been investing a considerable amount of resources into its domestic production of steel supplies. It has fostered this domestic production by providing funding and economic assistance to domestic firms that have the expertise in steel smelting and processing capabilities:

One of the proposed plants is a plate mill...the mill will have a capacity of 1.5 million t/y and will house a direct reduced iron facility...The second project is a cold mill...The product slate will include 150,000 t/y of coldrolled products and automotive sheets, 350,000 t/y of hot-dip galvanised steel sheets and 350,000 t/y of tin plate product. (Baxter, 2014, p.9)

Clearly, existing steel production facilities combined with these proposed steel production facilities are aimed at injecting some independence into Saudi Arabia's steel dependence on the international markets. Furthermore, this passage works to illustrate the diversity of steel products that the Kingdom has to accommodate within the steel supply chain both domestically and internationally as well.

The shift to domestic production may not have provided Saudi Arabia with immediate steel independence but it is certainly on that path. Still, considering the Kingdom's position globally as a major steel commodities importer, complete independence in the steel industry is unlikely. The figure below lists the largest steel importing markets globally which works to place Saudi Arabia within the context of the global steel market:

Figure 1: List of Top Steel Importers

Rank	Net Imports (imports - exports)	Mt
1	United States	17.8
2	Thailand	14.4
3	Indonesia	11.6
4	Vietnam	8.6
5	Saudi Arabia	6.4
6	United Arab Emirates	5.3
7	Algeria	5.1
8	Philippines	4.8
9	Iraq	4.5
10	Egypt	3.9
11	Singapore	3.9
12	Hong Kong	3.2
13	Canada	3.1
14	Poland ^(A)	3.1
15	Iran	2.7

(World, 2014, p.25)

As the figure demonstrates, Saudi Arabia is the 5th largest importer of raw and finished steel imports globally. This level of steel importation within the country confirms the fact that it is experiencing a substantial amount of economic growth and activity.

Steel Shortages in Saudi Arabia

Saudi Arabia has experienced a number of periods of steel supply shortages over the past 5-10 years or so. These types of steel shortages work to create spikes in the price of the commodity for consumers such as construction firms and product manufacturers that depend on finished steel in short, long or roll form. The research reveals that in 2008 steel prices spiked due to supply issues but these increases experienced a market correction before 2009 and by 2012 long steel supplies into the Kingdom dropped by 10% year-on-year (Durmus, 2013). Consequently, the data and information all point to a degree of volatility within Saudi Arabia with respect to steel in its various forms. The Kingdom has attempted to compensate for this volatility in one form or another. The rationale behind this domestic production is that any increase in domestic output can be utilized to smooth out supply shortages on the open market for unfinished and finished steel commodities.

Domestic steel production itself amounts to an infrastructure commitment on the part of the Saudi government and also contributes to demand. Thus, there has even been a comprehensive effort supported by the Saudi government to improve its domestic production of steel supplies. In fact, the data available demonstrates that Saudi Arabia actually increased its overall steel production some 15% to about 6.29 million metric tons during 2014 (Regional, 2015). Since the Kingdom's domestic steel production improved by some 15% from 2013 to 2014, its steel importers were able to accommodate international fluctuations in availability. These fluctuations arise from supply chain and distribution factors relating to demand in other markets such as China which has been demanding ever greater percentages of steel supplies. The Kingdom has, in fact, managed to improve its domestic steel production by another 5.4% during 2015 thus far as evidenced in the table below:

Table 1: Regional Domestic Steel Production for 2015

	Percentage change
Iran	15,442
Qatar	2,236
Saudi Arabia	5,471
UAE	2,878
Algeria	417
Egypt	6,754
Libya	712
Morocco	558

(Regional, 2015)

Iran and Egypt are the only other two Middle Eastern markets that managed to out-produce Saudi Arabia's domestic production levels of steel. Given Egypt's ongoing political and economic issues, it is not unexpected that Saudi Arabia is likely to surpass Egypt's domestic steel production in the near future.

Hoarding, Stockpiling and Shortages

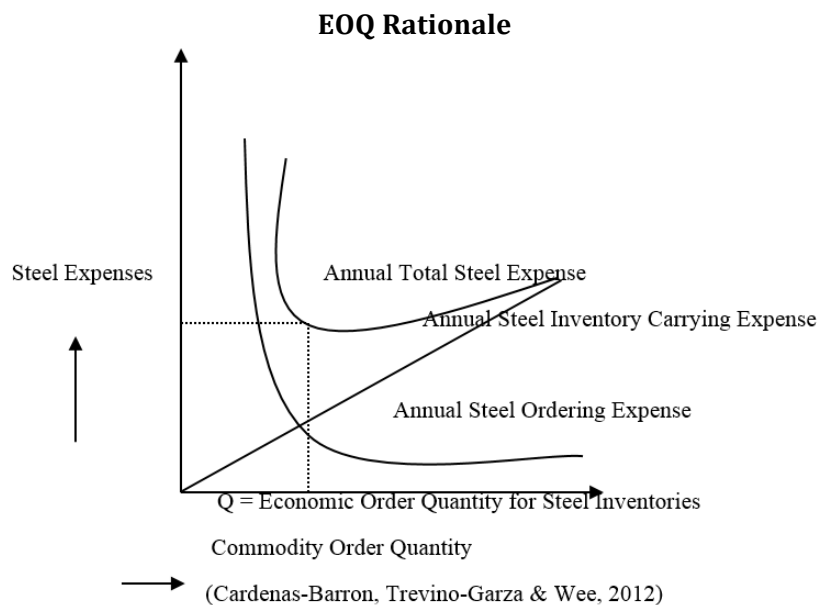
The steel market in Saudi Arabia is subject to a number of different supply chain reactions which affect the availability and thus the price of the commodity. While Saudi Arabia has done much to improve its domestic production of steel it remains a net importer of the commodity. Therefore, many of the supply chain participants both internationally and domestically are prone to hoarding and stockpiling steel products which simply refers to holding onto excess inventories in the anticipation that future supplies may be difficult to come by (Cho & Lee, 2013). Initially, this might seem to make reasonable business sense but the effect of this type of

hoarding and stockpiling activity is to create downstream effects that interfere with the efficiency of the entire supply chain. All supply chain participants depend upon the accurate calculation of an economic order quantity or EOQ. The EOQ is a calculation which is founded upon the idea that the demand for a commodity is predictable, the commodity lead-time within the supply chain is known and that there is little variation along the supply chain (Chen, Cardenas-Barron & Teng, 2014). Developing an accurate EOQ model forms the nucleus of efficient supply chain management.

In those instances where an accurate or reliable EOQ is not fully developed, there are negative consequences within the supply chain. These negative consequences result in the tendency for supply chain participants to undertake strategies such as hoarding or stockpiling inventories which goes on to result in even more unpredictability in the supply chain. One such unpredictable event that results from these reactions is the bullwhip effect in which large and dramatic swings in the supplies of steel whip up and down the supply chain making it almost impossible to accurately forecast future demand and to efficiently meet current demand (Mehdi & Farahani, 2014). While there is always a degree of uncertainty within the supply chain, the recognition that hoarding and stockpiling of a commodity is a negative must be understood by all supply chain participants. An accurate and reliable EOQ is one that accounts for proper lead-times and that is based on actual market demand rather than supplier paranoia regarding future inventory availability. In essence, many of the steel industry supply chain participants for Saudi Arabia have developed EOQs that have built in inventory reserves or buffers:

Figure 2: EOQ Calculation Identifying Hoarding/Stockpiling

$$EOQ = \sqrt{\frac{2 * Demand * Re-order.Cost}{Carrying Cost}}$$

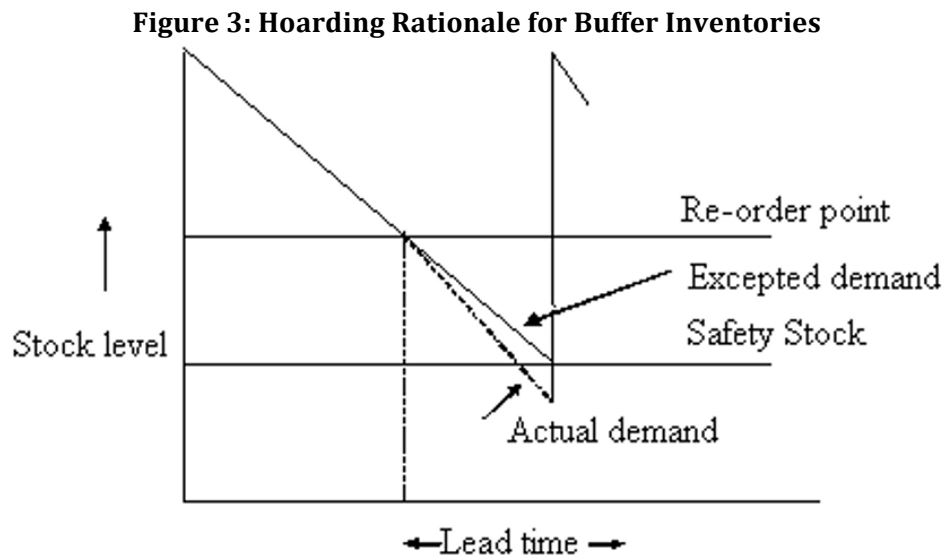


The underlying rationale behind this type of EOQ calculation by the Kingdom’s steel suppliers and other supply chain participants is understandable to a point.

Developing a buffer supply of steel does allow these participants to smooth out product shortages in the supply chain. However, the actual result of this rationale is independent

supply chain participants all developing buffer inventories in an uncoordinated manner that results in bullwhip effects up and downstream in the supply channel. The development of buffer inventories is an effort by supply chain participants to inject certainty back into what some participants believe to be an uncertain market. This problem with this type of approach is that uncertainty itself is difficult to quantify accurately. The result is that developing accurate EOQ models that have built in downstream buffer inventories usually results in undue hoarding and stockpiling which actually contributes to artificial demand back up the supply chain (Chen, Cardenas-Barron & Teng, 2014). There are analytical methods that can be applied to buffer inventories accurately but these all function on the assumption that the given commodity market is functioning rationally.

Commodities are subject to a number of different external market influences that can affect how product is moved up and down the supply chain. Hence, supply chain participants have to be aware of not only how product is being moved, the cost of this movement and proper forecasting techniques but they also must be aware of what inventories are being carried up and down the supply chain. The practice of hoarding inventories is inherently irrational in its approach regardless of the statistical analysis applied to develop the underlying forecasting models that might be used to justify such activity. Hoarding usually occurs then in the following conceptual manner:



Buffer inventories are usually calculated by factoring the maximum acceptable product lead-time and the commodity's normal lead-times within the supply channel with demand. On the surface, such buffer inventories or hoarding can positively impact customer service quality because availability is improved at the final supply chain link.

However, eventually this hoarding works its way back up the supply chain and these wide fluctuations in supply will whip back downstream resulting in price volatility. This is where developing an accurate EOQ model that accounts both for forecast demand and market uncertainty is critical to the efficiency of the supply chain for steel products. An accurate EOQ model that accomplishes these outcomes allows supply chain participants to minimize their steel product orders, buffer inventories and hence reduces their overall inventory carrying expenses (Widyadana & Cardenas-Barron, 2011). Consequently, a more predictable EOQ model for steel within the Kingdom that allows for a buffer inventory while resisting hoarding might resemble the following:

Table 2: EOQ for Saudi Arabia's Steel Supply Chain

Steel Products	Types of Steel Commodities	Demand Annually	Re-Ordering Expense	Carrying Expense by steel unit/year	EOQ for Steel	Overall # of units Ordered	Overall # of units ordered annually
1.	Blanks	3,60,200	12,220	2	66,272.17	30,200	5.43
2.	Coils	48,200	6,220	2	17,251.09	4,200	2.78
3.	Bars	1,44,200	1,720	36	3,687.82	12,200	39.05
4.	Crude Steel	96,200	1,720	36	3,011.09	8,200	31.88
5.	Flats	2,40,200	1,720	36	4,760.95	20,200	50.41
6.	Galvanized	30,200	1,720	2	7,141.43	2,520	4.20
7.	Longs	42,200	1,720	2	8,449.85	3,520	4.97
8.	Plates	21,620	4,720	2	10,075.71	1,820	2.14
9.	Slabs	9,620	6,220	2	7,714.92	820	1.24
10.	Strips	3,60,200	6,220	2	47,244.05	30,200	7.62

***Pro-forma Estimates**

This data in the previous table represent an EOQ model that accounts for an estimated overall inventory that is ordered annually by the Kingdom's supply chain participants. This EOQ figure is factored in relation to other data such as reordering costs, demand and regular order quantities.

The result is that the level of overall variation within the supply chain regarding inventories and demand forecasted is identified. This in turn results in the recognition that downstream hoarding is taking place and that this stockpiling undermines upstream efficiency. A more rational approach to developing practical buffer inventories within the Kingdom's steel supply channel and remove upstream uncertainty is shown in the table below:

Table 3: Stable Buffer Inventories in Steel

Steel Product	Types of Steel Commodities	Maximum Steel Lead Times	Normal Steel Lead Times	Forecast Demand	Buffer Inventories
1.	Blanks	0.90	.30	3,60,200	37,440
2.	Coils	0.90	.30	48,200	4,992
3.	Bars	0.90	.30	1,44,200	14,976
4.	Crude Steel	0.90	.30	96,200	9,984
5.	Flats	0.90	.30	2,40,200	24,960
6.	Galvanized	0.90	.30	30,200	3,120
7.	Longs	0.90	.30	42,200	4,368
8.	Plates	0.90	.30	21,620	2,246.4
9.	Slabs	0.90	.30	9,620	998.4
10.	Strips	0.90	.30	3,60,200	37,440

***Pro-forma Estimates**

The data in the previous table illustrates more predictable and rationale buffer inventories for steel within the supply chain by product. Lead-times for each primary steel product is calculated utilizing both annual estimates as well as 90 day and 60 increments due to shipping, transportation and logistical factors within the supply chain. This type of formula ensures that each supply chain participant is permitted to build a buffer inventory but in a way that does not result in bullwhip effects upstream in the supply chain.

DISCUSSION AND ANALYSIS

The observation is such that downstream stockpiling is an inefficient use of capital within the supply chain. Hoarding and stockpiling are reflections of a lack of capital justification within inventory management in the supply chain. Essentially, steel inventories in the downstream supply chain and, indeed, all along the supply chain, must be arrived at rationally. This is accomplished as a measure of commodity sales in which inventories reflect the ratio of overall steel sales as a measure of the average steel inventories at all points along the supply chain (Lev, 2013). Hence, inventory practices within the steel supply chain must be governed by financial policies as well. These are policies in which calculations such as steel product turnover is measured in all meaningful accounting periods in the financial calendar. This financial imperative in determining efficient steel downstream steel inventory levels is displayed below:

Table 4: Velocity of Steel Product Turnover Ratios

Year	Net Steel Sales	Average Steel Inventory Levels	Predicted Ratio	Product Velocity Shown in # of Days
2015	12,40,05,144	8,42,09,471	1.46: 1	250
2016	16,06,44,669	8,92,28,407	1.80: 1	204
2017	11,74,40,581	14,52,26,925	0.80: 1	456
2018	55,54,74,571	18,98,24,481	2.92: 1	125
2019	79,11,78,220	17,40,71,614	4.5: 1	81

***Pro-forma Estimates**

This analysis of lead-times with more rational buffer inventory forecasting techniques demonstrates that some inventory build-up is acceptable.

The trend estimates for the Kingdom indicate that steel imports are almost certain to continue to grow over the next five years. This expected steel import growth will occur despite the increase the Kingdom’s domestic steel production which accounts for a slight decline in overall imports but does not radically alter the growth trend (See Appendix 1). Primarily, buffer inventory levels within the steel supply chain should not interfere with market-driven pricing in the steel commodities industry. Whatever levels that the downstream buffer inventories are set at, these should always be such that excess inventories could be converted into customer sales within a relatively brief period of time.

Calculating Downstream Inventories

Part of the steel forecasting process is to account not just for end-demand in the marketplace but also to account for buffer inventory carrying levels. One approach to achieve this level of inventory sophistication without resulting in irrational hoarding and stockpiling is to utilize regression as a form of forecasting tool. The concept of regressing data implies a degree of dependence of one factor upon the relative independence of another factor which is typically demonstrated through the X and Y variables (Lev, 2013). This analytical process of regressing forecast demand, real demand and inventories is presented below:

Figure 4: Analytics in Regressing for Demand

$$Y = a + bx$$

In which $a = \bar{y} - b \bar{x}$; and $b = \frac{\sum xy - n \bar{x} \bar{y}}{\sum x^2 - n \bar{x}^2}$

Accordingly, the result of this particular regression of inventories and demand ensures that supply chain participants would be supported in gradually increasing buffer inventories. This type of approach to market uncertainty is demonstrated in the following table:

Table 5: Downstream Buffer Inventory Build-up

Inventory Years	Buffer Inventories Shown as Rs & Y	X X=x-2219	X ²	XY & (Rs)
2015	9,17,88,514	-2	4	-18,35,77,228
2016	8,66,68,32	-1	1	-8,66,68,32
2017	22,37,85,552	2	2	2
2018	17,58,61,213	1	1	17,58,61,213
2019	17,22,82,214	2	4	34,45,64,228
Product Totals(Σ)	73,23,85,591	2	12	25,21,79,913

***Pro-forma Estimates**

Where the following regression is applied to the predicted inventory levels and forecasted steel demand in the Saudi marketplace:

Figure 5: Regressing Inventories and Demand

$$\bar{x} = \frac{\sum x}{n} = \frac{2}{5} = 2$$

$$\bar{y} = \frac{\sum y}{n} = \frac{73,23,85,591}{5} = 14,62,77,118.2$$

$$b = \frac{\sum xy - n \bar{x} \bar{y}}{\sum x^2 - n \bar{x}^2} = \frac{25,21,79,913 - 5 * 2 * 73,23,85,591}{12 - 5 * 2} = 2,52,17,991.3$$

$$a = \bar{y} - b \bar{x} = 14,62,77,118.2 - 2,52,17,991.3 * 2 = 14,62,77,118.2$$

$$y = a + bx$$

$$= 14,62,77,118.2 + 2,52,17,991.3 x$$

According to the regression analysis, there is a reliable point in the data in which steel buffer inventories are allowed to increase as a reflection of uncertainty. Yet, this is accomplished over a more manageable period of time which is not reflective of a knee-jerk reaction in the marketplace to uncertainty. This approach removes the threat of upstream bullwhip effects due to downstream stockpiling based on independent paranoia regarding inventory levels.

CONCLUSIONS AND OBSERVATIONS

This report examined the question of whether downstream stockpiling or hoarding of steel inventories within the supply chain negatively affected upstream inventories. Specifically, the question is whether or not such downstream hoarding creates artificial demand in the marketplace with respect to the Saudi Arabian market. The report identified the steel industry and the supply chain that supports it as consisting of steel products including rolls, sheets, blanks, ingots, longs and shorts and so on. The Saudi Arabian market has been increasing its imports of steel products for many years in order to support the infrastructure buildout and construction industry in the market that has been expanding rapidly over the past decade or so. The research demonstrated how the Saudi government has been responding to this downstream stockpiling and the artificial upstream demand that it creates. The Saudi

government has been fostering the growth of the Kingdom’s own domestic steel producing industry for a number of years. With the Kingdom’s current domestic steel production which provides over half of its steel needs at current demand and the planned establishment of several new steel plants that will add over 2 million metric tons of annual production to the market, Saudi Arabia will bolster its domestic production even further.

The Kingdom should be able to eventually remove the incentive that downstream suppliers have to hoard steel products despite the lack of a true stimulus to do so. Hence, the findings indicate that what the Kingdom’s steel industry really needs is a more efficient means to manage its steel industry supply channel. One effective means of determining the most efficient approach to managing a supply chain is the fast-moving, slow-moving and non-moving or FSN process. The FSN process allows the supply chain participant to structure the supply chain in a way that reflects the individual demand for each product item rather than for the product class itself. Hence, the FSN approach assigns priority to those steel products that have greater demand and therefore move faster compared to those steel products that have less demand and therefore move slower and these two divisions in turn are differentiated from those steel products that manifest little or no movement (Vrat, 2014). It is essential to be able to differentiate steel products based on this characteristic of movement because steel is a commodity that does fluctuate based on productivity, supply chain factors and downstream hoarding and so forth. This approach to the steel supply chain servicing Saudi Arabia can be formulated in the following manner:

Table 6: Fast/Slow/Non-Moving Steel Products

Fast-Moving	Slow-Moving	Non-Moving
Coils	Plates	Crude
Bars	Slabs	
Flats	Strips	
Longs	Blanks	
Galvanized		

The table above identifies those faster-moving steel products which are some 50% of the steel products that dominate the Saudi steel supply chain. The crude steel products tend to be non-movers in the Saudi marketplace because they require special processing before they can even be integrated into the production, manufacturing or construction industries.

The data demonstrated that Saudi Arabia has experienced periods of price volatility in the steel market. These periods are a reflection of supplier and distributor uncertainty more than any actual product shortage in the international marketplace. For instance, in 2008 prices of steel did spike but there was not an actual shortage of steel products but instead this was due more to the logistical capacity of suppliers to move steel products to other markets versus Saudi Arabia. Once the supply channel began to adapt to this logistical feature in the supply chain, steel prices dropped between 2009 and 2012 by 10% annually. Simply put, it was easier for suppliers to move steel products into other markets who had the same demand level but who also were logistically easier to ship into such as China with its vast network of bulk shipment ports and intermodal waterways. Hence, the immediate knee-jerk reaction on the part of suppliers within Saudi Arabia’s steel industry was to begin to stockpile reserves once supply

access recovered. While some buffer inventory is useful and, indeed, preferred, there is a point at which a buffer inventory shifts into the area of product hoarding.

The data and analysis revealed that this point at which buffer inventories cross over into hoarding territory can be found through a specific formula. This formula was shown to be the EOQ calculation which utilizes real demand times re-ordering costs divided by the product carrying cost. At any rate, if the annual total steel expense exceeds the annual carrying costs for the inventory then there is excessive inventory or stockpiling. This may not occur year around but there would be points throughout the year at which more steel products are ordered than are distributed which is indicative of hoarding. Therefore, an improved EOQ process that eliminates the opportunity for independent supply chain operators to hoard and stockpile inventory would be quite useful. This would act to free up supply chain operator capital that could be redirected towards improving operational efficiency. An improved EOQ framework would allow supply chain operators to maintain some buffer inventory for steel products but these would be limited in scale. Efficiency could be further improved within the supply chain by focusing on those steel products that tend to move faster versus those that are slow moving.

Additionally, there should be a more efficient way to organize the product flow through the entire supply chain. This more efficient methodology would be a supply chain that is organized through the FSN method. With steel products such as crude steel, flats and galvanized steel moving in fewer quantities than other steel products but having a higher carrying cost, it makes sense to assign these steel products to the slow-moving category and inventory these items at much lower levels. However, the regression of the data indicated that such products as flats were forecasted to increase due to the expansion of infrastructure projects in the Kingdom and thus it would be transferred to the fast-moving category within the FSN framework. The point is that the number of days in inventory for each individual steel product should be reduced to the shortest period that is possible without completely removing all buffer inventories.

Buffer inventories provide the capacity for steel suppliers and distributors to fluctuate product movement in response to both supply and demand whether this supply or demand is artificial in character or not. However, excessive inventories place an immense financial burden on the supply chain operators and, ultimately, create artificial demand in the upstream supply chain that eventually results in increasing inventories all along the supply chain. This is because this artificial demand is not created by the end consumers who would otherwise remove the steel products from the supply chain at purchase. Essentially, excessive stockpiling and hoarding of inventory creates a kind of iterative ordering process that keeps adding even more products to the inventories of suppliers in the downstream supply chain. By developing a more accurate EOQ calculation based on real market figures and utilizing the FSN approach to supply chain design, the Saudi Arabian steel market would become much more reflective of actual market conditions.

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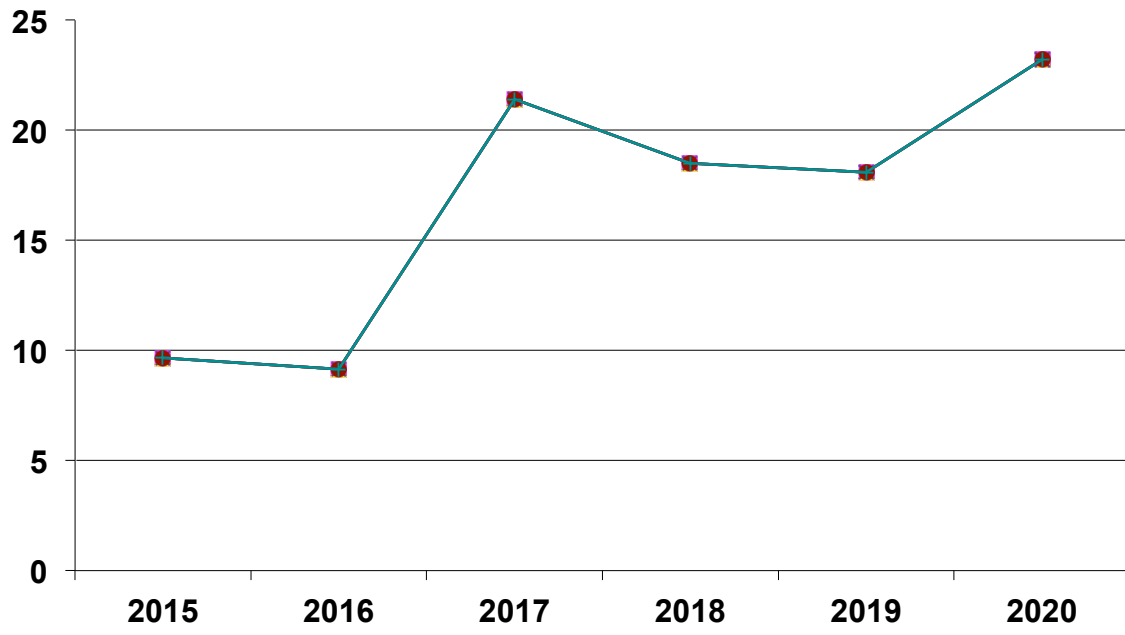
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APPENDICES

Appendix 1: Steel Inventory Trends



Capital Structure and Firm Performance in the Nigerian Cement Industry

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Abstract

The study examines the impact of capital structure on financial performance of firms in Nigerian cement industry. The population of the study 7 companies, a sample of 4 listed companies were selected. The research design is ex-post factor using two models to analyse the impacts of long term and short term debts on Return on Assets (ROA) and Return on Equity (ROE). The study uses balanced panel data of 20 observations from the 4 listed companies for the periods ranging from 2010-2014. Descriptive statistics, correlation and regression are used as tools of analysis. The study reveals that, there is statistically significant effect between long and short term liability on Return on Assets (ROA) and Return on Equity (ROE). The study however, concluded that the performance of companies in the cement industry is not optimized as a result of their inability to utilized debts in their capital structures. Finally, the paper recommends that, cement companies should encourage the use of long term debt in there capital structure since it has positive impact on their financial performance.

Key Words: Capital Structure, Ownership Structure, Firm Performance & Cement Industry.

INTRODUCTION

One of the most central position theories in firm financing policy is the theory of capital structure. The capital structure of a firm is the combination of debt containing preference stock and equity; this is referred to as the firms' long term financing mix, Watson and Head (2007). Capital structure decision is a basic for any business establishment because of the need to get the most out of return to the numerous stake holders and also because of the fact that such decision has excessive impression on the firms' ability to compete in competitive atmosphere. One critical issue challenging managers today is how to decide on the mixture of debt and equity to achieve optimal capital structure that would lessen the firm's cost of capital and increases return to owners of the business. Though, firms generally have a choice as to how to mix debt and equity, managers attempt to establish a particular mixture that will get the most out of performance and the firm's market value. Such kind of mixture of debt and equity will lessen the firm's cost of capital and hence increases the firm's returns and market value is the

ideal capital structure. Unfortunately, financial managers lack clear cut policy that can give them a guide when taking decision in piecing together optimal capital structure.

The notion of contemporary theory of capital structure is the pathway breaking contribution of Modigliani and Miller (1958) in the perfect capital market postulation. Modigliani and Miller (1958) postulate that under condition of no bankruptcy cost and frictionless capital markets without taxes firm's value is independent of its capital structure. Alternatively, other school of thought holds that financing choice reveals an attempt by corporate managers to balance tax guard of higher debt beside potential huge cost of financial distress arising from under investment (Awunyo, 2012). In addition much debt can destroy firm's value by causing financial distress and under investment then too little debts can also leads to over investment and negatively affect returns particularly in large and mature firms (Barclays and Smith, 2005). The choice of capital structure and its subsequent risk experience is very vital in economic performance of every company. Hence, the choice of debt or equity ultimately results in the growth value of investment made by numerous sets of investors particularly equity investors (Watson and Head, 2007). This is essential because of the fact that equity investors have greater expectation of returns on their investment in the form of higher dividends and capital gain (Sulaiman, 2001). Any result different to this expectation will make holders of equity shares sale off their shareholding which can lead to the fall in the share price of the company. The fall in share price is an indicator to potential investors of the poor performance of the company and thereby discouraging potential investors from investing mutually in equity stock and debt.

The expansion in Nigeria's economy over the years has been followed by an accelerated growth in the country's cement industry. While the economy has risen since the country's return to democracy in 1999, with services now accounting for the modal proportion of the economy post GDP rebasing, the cement industry has recorded increase in production capacity, from c.3.28MT in 1999 to c.28.95MT in 2013 (Neneng, 2014). Over time, the Nigerian cement industry has undergone different stages of structural evolution; from complete dependence on imported cement to cater for the ever rising demand for cement in the domestic market, the industry has evolved to a more vibrant, multibillion-dollar, self-sufficient cement industry, with an expanding capacity more than sufficient to cater for domestic needs and support government's goal to diversify the nation's revenue sources, improve foreign earnings and make Nigeria a net exporter of excess cement in the medium-to long-term. The structural evolution of the industry has created improved employment prospects, eliminated the exportation of jobs meant for Nigerians to other cement producing nations hitherto renowned as exporters of massive quantities of cement into Nigeria, saved costs associated with cement importation and helped Nigeria to begin unwinding dependence on cement imports to meet local demand. Gradually, Nigeria has begun earning income from exportation of excess cement produced locally.

However, the industry is bedeviled with numerous problems of how to fund the dollar cost of the various modernization which urgently needs to be carried out, erratic power supply as companies are forced to invest an increased amount of resources in self-generation of power to keep the plant running and ownership structure as government formerly owned majority of the shares in most of the cement companies in Nigeria due to the indigenization policy of 1972. There is evidence to show that the companies that have the government as majority shareholders have consistently under performed. However, the recent development of privatization of public enterprises is resulting in ownership changes of the major producing companies (Awen, 2004).

Many theories have been advanced to elucidate on capital structure of firms. Though, there is lack of consensus in the midst of researchers of financial management with respect to optimal capital structure. Such discrepancies in various theories are being propounded to update all-important decision and to further make capital structure essential. As a result, capital structure decision is very vital, particularly in relation to performance of a firm in terms of profitability and value of the equity (Awunyo, 2012). In Nigeria, number of studies has been conducted to examine the determinants of capital structure and profitability. However, only few of them were specifically directed toward listed cement companies in Nigeria.

Consequent upon this, the paper seeks to examine the impact of capital structure on firm's financial performance in the Nigerian cement industry. However, this study considers Return on Equity, long term debt, short term debt and firm size for the decision and analysis of data for a period of 5 years, spanning from 2010 to 2014.

LITERATURE REVIEW

This section reviews the concepts of capital structure, firm performance and ownership structure as defined by various scholars in the field. Also, the section reviews previous studies carried out in the field of capital structure and firm performance as well as the brief on the cement industry.

The Concept of Capital Structure

Many Scholars in the field of finance have advanced quite a number of definitions as to the concept of capital structure. Nirajini and Priya (2013) define capital structure as the way in which an organization is financed a combination of long term capital (ordinary shares and reserves, preference shares, debentures, bank loans, convertible loan stock and so on) and short term liabilities such as a bank overdraft and trade creditors. According to Brockington (1990), described capital structure of a firm as the components of its sources of financing, broadly categorized as equity and debt finance. Also, Brealey and Myers (2003) define capital structure as the mix of different securities. Besides, Konchhar, (1997) as cited in Saidu (2014) viewed firms capital structure is described as the mix or combination of its financial resources available for carrying on the business and is a major determinant on how the business operates. According him financial capital is an uncertain but critical resource for all firms as a result; suppliers of the finance are to exert control over firms.

From the above definitions, it could be deduced that debt and equity form the basis of financing business activities. As debt holders exert minimum control over the company, and do not in any case determine how the business activities should be run. They are on side of the fixed rate of return and protected by contractual terms of obligations. This term determine what return they are entitling to and when is it due for payment. Equity holders, on the other way round, are the residual suitors of all the business' returns after resolving for interest on debt. They however, form the most risk bearers, having greater control virtually overall activities, decision inclusive.

The Concept of Financial Performance

There are little consensus about the best mechanism to apply for evaluating performance. Some researchers use market measures such as Tobin Q (Awunyo-Victor and Bandu, 2012; Groppe and Heider, 2009), others use accounting measures such as ROA, ROE, (Muritala, 2012; Oladeji and Olokoyo, 2014; Saidu, 2014; and Salawu, 2009) and many others use both. The three ways represent the different perspective of how to evaluate firm financial performance and theoretical implication (Hillman and Keim, 2001). As such using any of the two

performance measures is bound by peculiar bias (MacGuire, Scheneeweis and Hill, 1986) as cited in Saidu, (2014). However, accounting measure captures the historical aspect of the firm performance, whereas market measures are forward looking and focus on the market performance. Besides market based measures are generally relevant accounting based measures commonly used by researchers (i.e Return on equity, return on capital employed and return on assets). This could be as a result of it historical antecedent measures to managers.

Capital Structure and Firm performance

Agency cost theory is based on the idea that the interests of the company's managers and its shareholders are not perfectly associated. In their seminal paper Jensen and Meckling (1976) as cited in Margaritis and Psillaki (2009), lay emphasis on the importance of the agency costs of equity arising from the separation of ownership and control of firms whereby managers tend to maximize their own utility rather than the value of the firm. Agency costs can also be present from conflicts between debt and equity investors. These conflicts ascend when there is a risk of defaulting. This risk of defaulting may form what Myers (1977) referred to as an "underinvestment" or "debt overhang" problem. In such case, debt may have a negative effect on the value of the firm. On the other hand, there may be cases where managers have enticements to take excessive risks as part of risk shifting investment strategies (see Jensen and Meckling, 1976). This leads us to Jensen's (1986) "free cash flow theory" where as stated by Jensen (1986: p. 323) "the problem is how to motivate managers to disgorge the cash rather than investing it below the cost of capital or wasting it on organizational inefficiencies." Thus high debt ratios may be used as a disciplinary device to reduce managerial cash flow waste through the threat of liquidation (Grossman and Hart, 1982) or through pressure to generate cash flows to service debt (Jensen, 1986). In these circumstances, debt will have a positive effect on the value of the firm.

But firm performance might also distress capital structure choice (see Berger and Bonaccorsi di Patti, 2006). This reverse causality effect is in essence a feature of theories linking agency costs (Jensen and Meckling, 1976; Myers, 1977; Harris and Raviv, 1990), corporate control issues (Harris and Raviv 1988), and in particular, lop-sided information (Myers and Majluf, 1984; Myers, 1984) and taxation (DeAngelo and Masulis, 1980; Bradley et al., 1984) with the value of the firm. . Graham (1999) posits that taxations do in fact affect corporate financing decisions but the magnitude of such an effect is mostly not large.

Mackie-Mason (1990) as stated by Joshua (2008) concludes that changes-in the marginal tax rate for any firm should affect its choices between equity and debt

Ownership structure and capital structure

The link between ownership structure and capital structure is an essential one as it supports the relationship between corporate governance and firm performance. External block holders have solid incentives to reduce managerial opportunism (Shleifer and Vishny, 1986) and they may wish to use debt as a governance mechanism to control management's consumption of perquisites (Grossman and Hart, 1982). If external block holders monitor management effectively, managers may not be able to adjust debt to their own interests as freely as if such investors did not exist (Brailsford et al., 2002). In that case firms with enormous exterior block holdings are expected to have higher debt ratios at least up to the point where the risk of bankruptcy may prompt them to lower debt. Family firms may also use higher debt levels to the extent that they are perceived to be less risky by debt holders (Anderson et al., 2003).

Friend and Lang (1988) had a positive relationship between enormous external ownership and debt. The same authors also find a negative relation between leverage and interior share

ownership same with the view that managerial block holders select lower debt to protect their non-diversifiable human capital and wealth invested in the firm. Brailsford et al. (2002) studies also show a positive relation between external block holders and debt. However they find that the relationship between managerial share ownership and leverage is non-linear. By low levels of managerial ownership, agency conflicts compel the use of more debt but as managers become engrained at high levels of managerial ownership they try to find a way to reduce their risks and they use less debt. Anderson and Reeb (2003b) find that insider ownership by managers or families has no effect on leverage while King and Santor (2008) shows that both family and financially controlled firms carry more debt in their capital structure.

The Nigerian Cement Industry

The cement industry in Nigeria has experienced immense growth over the past few years. With a population of over 140 million people and a growth rate of approximately 3% yearly, the demand for and consumption of cement is expected to increase. Government however remains the largest consumer of cement in the country with an estimated 50% of total consumption. The frequency of roads and bridge reconstruction as well as rehabilitation of social infrastructure emphasises government's continued patronage of the industry but also widens the demand-supply gap which currently exist. The Nigerian cement industry has the potential to contribute to the larger economy in several ways. First, by virtue of its nature, the industry is a labour intensive and is therefore a major employer of labour both skilled and unskilled. The industry also has a significant contribution to the country's Gross Domestic Product (GDP) and is a source of foreign direct investment. Though the construction, renovation and rehabilitation of major roads, bridges, networks and public infrastructure, the cement industry plays a major role in overall economic development and enhancement of social welfare.

The Nigerian cement industry was one of the earliest import-substitution industries in the country. The history of the cement production in Nigeria dates back to 1957. Initially three cement plants were commissioned by the northern, eastern and mid-western regional government. Subsequently, other companies such as Ashaka cement, BENUE cement company (BCC), west African Portland Cement Company (WAPCO) and Cement Company of Northern Nigerian (CCNN) were established. Today, there is several cement plants located in various parts of the country. Some of the notable companies include: West African Portland Cement Company Plc (WAPCO), Ashaka Cement Plc, Benue Cement Company Plc (BCC), Cement Company of Northern Nigeria (CCNN), Dangote Industries Limited, Nigerian Cement Company Limited, Edo Cement Company Limited, and Calabar Cement Company Limited. One of the major characteristics of the cement industry in Nigeria is the problem of demand vs. supply inequality. Since inception, available supply has not been able to meet the ever growing demand for cement. Even in 1980's, during the economic recession which witnessed a decline in the demand for cement, these supply gaps were still very much evident (DLM Research, 2014).

The cement industry is crucial to the provision of adequate and affordable houses for the various strata of the Nigerian society. It is therefore necessary to evaluate/assess its well-being in the face of current happenings in the economy; like increased competition from imported brands, privatization, the perennial 'marginalization' of the manufacturing sector by lenders, inflation and all sorts (Benjamin, 2004).

Empirical Review of Related Literature

Capital structures are studied by quite number researchers within and across the world. Evidence shows that findings were obtained from the studies as regard to capital structure and financial performance of firms, industry as well as the economy as whole.

Earlier among the studies reviewed are the work of Margatitis and Psillaki (2009), where they used quartile regression methods and found out that the nature of relationship between leverage ratios and firm performance is positive and significant. Their research used long term and short term leverages to proxy leverage ratios and firm characteristics as control variables. Also, Adeyemi and Abor (2011) examined the relationship between capital structure and firms value. Their study used chi-square to measure longitudinal data. Their findings reveal significant positive relationship between the choice of capital structure and market value.

Besides, Awunyo and Badu (2012), study listed banks to examined the impact of capital structures on performance of banks. The study employs both market and accounting performance measure and leverage ratios, firm size, age and board size are regress. Their finding shows that listed banks are highly geared and negatively related to bank performance. This may be attributed to the researchers over dependence on short term debt due to high level of lending rate and low level of bond market activities. Similarly, Antwi and Zhao (2012) used cross-sectional data on 34 quoted firms in Ghana and their result shows that component of capital structure (i.e., equity capital) is important to the firm value. Long term debt as the key determinant of firms value, is discovered to have more impact than equity capital.

Babalola (2012) assessed the impact of capital structure on firm performance using 10 firms over the period of 10 spanning from 2001-2009. He measures performance in a quadratic function, whereby performance forms the non-linear function of capital structure, as proxy by leverage ratio. The finding supports trade off theory in another dimension. In another study conducted by Ganiyu and Babalola (2012), where performance is measured by return on Assets and corporate governance variables to find their effect on capital structure and the result indicate that corporate governance has impact on company's financial decision.

Muritala (2012), in his effort to analyse capital structure on firms' performance in Nigeria, used unit root test and found that all variables used were non-stationary at all level. The study proposes that negative relationship exist between capital structure and firm performance. Data analysed using panel least square confirm that asset turnover, age, tangibility and firm size are positively related to firm's financial performance.

In Sri Lanka Leon (2013) and Nirajini and Priya (2013) study the effect of capital structure of firms performance. The former examined the listed manufacturing firms, while the later study trading companies listed at the stock exchange. Both studies used 5 years data from financial reports and accounts of the selected companies in the respective industries. Leon employs ROE and ROA to measure performance, while Nirajini and Priya used Gross profit, net profit, ROCE, ROE and ROA as performance measures. Both results indicate significant relationship between performance and leverage.

The result of empirical literature on the relationship between capital structure and firm performance are conflicting, as such necessitate further research despite those conducted in Nigeria and across, as little need to be done to improve the researches to suit the Nigerian context given the differences in technological advancement, level of economic growth, politics, laws, leadership style and level of awareness. Hence, this study covers the period spanning 2010-2014.

Theoretical Framework

Many scholars have advanced numerous explanations which serve as theoretical backing on the concept on capital structure. For the purpose of this research, the paper tends to look at the most commonly used theories on capital structure. Besides this theories are not exhaustive.

Modigliani-Miller Theory

The Modigliani-Miller theorem (of Franco Modigliani, Merton Miller) forms the basis for contemporary thinking on capital structure in 1958. The basic theorem states that, under a certain market price process (the classical random walk), in the absence of taxes, bankruptcy costs, and asymmetric information, and in an efficient market, the value of a firm is unaffected by how that firm is financed (Myers, 2001). It does not matter if the firm's capital is raised by issuing stock or selling debt. It does not matter what the firm's dividend policy is. Therefore, the Modigliani-Miller theorem is mostly referred to as the capital structure irrelevance principle.

The theorem was originally proven under the assumption of no taxes. According to Frank and Goyal, (2008), it is made up of two propositions which can also be extended to a situation with taxes. Consider two firms which are identical except for their financial structures. The first (Firm U) is unlevered that is, it is financed by equity only. The other (Firm L) is levered: it is financed partly by equity, and partly by debt. The Modigliani-Miller theorem states that the value of the two firms is the same.

Trade-off Theory

Kim (1978) studies showed that the choice of capital structure matters in influencing performance. The trade-off theory refers to the idea that a company chooses how much debt finance and how much equity finance to use by balancing the costs and benefits (Margaritis and Psillaki, 2009). Trade-off theory gives chance for the existence of bankruptcy cost. It states that there is an advantage to financing with debt (namely, the tax benefit) and that there is a cost of financing with debt (the bankruptcy costs and the financial distress costs of debt) (Kraus and Litzenberger, 1973). Miller (1977) argues that these costs do exist indeed, but they seem inexplicably small relative to tax savings as they are supposedly balanced. However, to Myers (1984), the marginal benefit further increases as debt declines, and as debt increases, while the marginal cost increases, so that a firm that is optimizing its overall value will focus on this trade-off when choosing how much debt and equity to use for financing. Empirically, this theory may explain differences in D/E ratios between industries, but it doesn't explain differences within the same industry (Margaritis and Psillaki, 2009). As such its usage under this study becomes imperative as the paper focus on trend analysis of cement industry financial performance.

Pecking Order Theory

In the theory of firm's capital structure and financing decisions, the pecking order was first proposed by Donaldson in 1961 and it was improved by Myers and Majluf (1984). It states that companies place in order of preference their sources of financing (from internal financing to equity) according to the norm of least effort, or of least resistance, preferring to raise equity as the last alternative means financing decision. Therefore, internal funds are used first, and when that is exhausted, debt is issued, and when it is not functional to issue any more debt, equity is issued (Myers, 2001).

Pecking Order theory attempts to capture the costs of lopsided information. It states that companies place in order their sources of financing from what it has at hand, when that becomes exhausted, then proceed to debt issue, when this seem work no longer, finally equity

becomes the last option. This is in accordance with the law of least effort, or of least resistance. This theory preserves that firms abide by the chain of command of financing sources and prefer internal financing when accessible, and debt is preferred over equity if external financing is necessary. As a result, the form of debt a firm decide on act as a sign of its need for exterior finance. The pecking order theory is dispersed by Myers (1984), when he argues that equity is a less preferred means to raise capital because when managers issue new equity, investors have confidence that managers think that the firm is overestimated and as such managers are captivating the benefit of this over-estimation. Thus, investors tend to place a lower price to the new equity issuance.

Agency Theory

This is a theory about the relationship between the principal (owner/shareholders) and the agent of the principal (employees/managers). This recommends that the firm can be regarded as a link of contracts between resource holders. An agency relationship ascends whenever one or more individual, called principals, hire one or more other individuals, called agents, to perform some service and then delegate decision-making authority to the agents (Margaritis and Psillaki, 2009). The agency theory perception was originally advanced by Berle and Means (1932), who argued that due to a continuous dilution of equity ownership of large corporations, ownership and control become more separated. This situation gives professional managers an opportunity to pursue their interest instead of that of shareholders (Jensen,1986) as cited in Salawu (2009). In theory, shareholders are known to be the only owners of a company, and the job of its directors is purely to safeguard and ensure shareholders' interests are maximized.

The issue here is that the interest of the principal and the agent are never precisely the same, hence the agent, who is the decision-making part, tries always to pursue his own interests in place of those of the principal. The main problem faced by shareholders is to ensure that managers will return excess cash flow to them (e.g. through dividend payouts), instead of having it invested in unprofitable projects (Jensen and Meckling, 1976). Muritala (2012), assert that, if the principal wants to make sure that the agent acts in his interests he must undertake some Agency costs (e.g. the cost of monitoring managers). As such the more the principals want to control the conduct of manager decisions the higher their agency costs will be. Yet, modern research has revealed that capital structure can somewhat cope with the principal-agent problem without substantially increasing agency costs, but simply by trading off equity for debt (Pinegar and Wilbricht, 1989; Muritala, 2012).

Lubatkin and Chatterjee, (1994), argue that firms can discipline managers to run businesses more efficiently by increasing their debt to equity ratio. Debt creation ensures contractually that managers will return excess cash flow to investors instead of investing it in projects with negative NPVs (Onaolapo and Kajola, 2010). This is caused by high degrees of control demand high interest expenses, which force managers to focus only on those activities necessary to ensure that the financial obligations of the firm are met. Hence, by having less cash flow available, managers of highly leveraged firms see their ability of using the firm's resources for discretionary- and often useless-spending, dramatically reduced.

The theory underpinning this research work is the trade-off theory. The theory is profit motivated theory. Trade off theory explains that tax shield debt has effect on firm profitability and shows that firm can get optimum capital structure. The theory further shows that, the form of debt capital could equally have effect on firm's performance.

Research Methodology

The research design employed in this study is ex post facto research design. Four (4) out of the seven (7) companies in Nigerian cement industry were selected as sample of the study. Data were collected from Annual Reports and Accounts of the sampled companies from the Nigerian Stock Exchange for the period of five (5) years i.e. 010 – 2014. The data were analysed using STATA software version 12.00 where summary of descriptive statistics, correlation and multiple regressions results were obtained and analysed to determine the impact of capital structure on firm financial performance in the listed Nigerian cement companies. This study uses two variables; dependent and explanatory variables. The dependent variable is the most usual accounting performance ratio; ROE is the measure of ratio of earnings before interest and tax to ordinary shareholders capital (Anwuyo and Badu, 2013; Muritala, 2012 and Oladeji & Olokoyo, 2014). It explains how well management is able to manage the equity invested by shareholders (Saidu, 2014).

Explanatory variables include both the independent and control variables adopted for the study. Independent variable for the study is leverage or debt commonly used in the research work. It is represented by debt to total assets ratio, divided into two; Long term debt to total asset; and Short term debt to total asset ratios as used by (Margatits & Psillaki, 2009; Anwuyo & Badu, 2013; Muritala, 2012; Antwi, Mills & Zhao; and Oladeji & Olokoyo, 2014). It is the ratio of total debt to the net assets of the companies. Firm size is the most commonly investigated control variable suggested to affect firm performance (Garko, 2012). It is measured as the log of total assets as used by (Garko, 2012 Muritla, 2012 and Anwuyo and Badu 2013).

In a bid to examine the impact of capital structure on firm's performance, we specify a model in line with the traditional theory of capital structure. The model is designed to accommodate ordinary least square (OLS) regression. As such, we adopt the capital structure model that states that firms' performance depends on capital structure and some control variables that is two independent variable and one control variable. Thus, following (Muritala, 2012; Ogebe et al, 2013; Oladeji and Olokoyo, 2014 and Saidu, 2014);

$$\text{Performance} = f(\text{leverage, size}) + \epsilon_i$$
$$\text{ROA}_{it} = \beta_0 + \beta_1 \text{LTD/TA}_{it} + \beta_2 \text{STD/TA}_{it} + \beta_3 \text{SIZE}_{it} + \epsilon_{it}$$
$$\text{ROE}_{it} = \beta_0 + \beta_1 \text{LTD/TA}_{it} + \beta_2 \text{STD/TA}_{it} + \beta_3 \text{SIZE}_{it} + \epsilon_{it}$$

The above model shows that the firm's performance relies on capital structure and size of the firm.

Where:

ROE = Return on asset

Size = Firm size or size of the firm

Leverage = total debt/total asset

LTD/TA = long term debt to total assets

STD/TA = short term debt to total assets

SIZE = Log of the total assets

ϵ_{it} = the error term

RESULTS AND DISCUSSIONS

This section presents, analyse, interprets and discuss the result obtained from the data generated from annual report and accounts of the sampled cement companies for the period of the study. The data was analysed using descriptive statistics, correlation matrix of the dependent and explanatory variables and regression analysis. The descriptive statistics

explains the various statistics such as mean, standard deviation and long term debt structure of the cement companies and Correlation matrix was employ to examine the relationship between the explanatory variable while regression coefficients with the purpose of testing the relationship between variables of the study. Table 1 provides such statistics.

Table 1: Descriptive Statistics of the Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
roa	20	.0124255	.0057012	.0049652	.0199005
roe	20	.2211664	.1277463	.0598853	.5040225
tlta	20	.3850627	.1365481	.1562515	.6325405
ltlta	20	.169889	.0857874	.069694	.419614
stlta	20	.2150385	.1143803	.019451	.490122
size	20	8.731998	.9228414	7.449094	10.19811

Source: Generated by the Researchers from the Annual Reports and Accounts of the sampled companies using Stata (Version 12)

Table 1 reveals that the Return on Assets (ROA) of the companies in the cement industry over the five year period ranged from 0.50% to a maximum of 1.99% and with average values of the dependent of 1.24% and the standard deviation is 0.0057012 indicating lack of substantial variation. Other variables which are independent in the table also indicate some level of variability. On the overall Total Liability to Total Assets (TLTA) has the highest standard deviation with about .1365481 and Return on Assets (ROA) has the lowest standard deviation account for only .0057012. These indicate that the long term debt and short term debt occupy 17% and 22% of the total assets.

In order to examine the level of relationship between the dependent and independent variables, correlation matrix is used. Variance Inflation Factor (VIF) test is carried out also to find out whether or not multi-collinearity exists as a result of the relationship between the variables. The correlation matrix in Table 2 provides some insights into which of the independent variables are related to the Return on Assets (ROA) (i.e., the dependent variable).

Table 2: Correlation Matrix of the Variables

	roa	roe	tlta	ltlta	stlta	size
roa	1.0000					
roe	0.0917	1.0000				
tlta	0.5025	0.0578	1.0000			
ltlta	0.3050	0.1713	0.5515	1.0000		
stlta	0.3706	-0.0593	0.7800	-0.0918	1.0000	
size	0.3439	0.3316	0.2218	-0.1641	0.3859	1.0000

Source: Generated by the Researcher from the Annual Reports and Accounts of the sampled companies using Stata (Version 12)

From the above table, the values are on diagonal all 1.0000 which indicate that each variable is perfectly correlated with itself. All the independent variables are positively correlated with Return on Assets (ROA). The positivity nature of the correlations implies that as the rate Return on Equity (ROE) with a correlation coefficient value of 0.0917, Total Liability to Total Assets (TLTA) with a correlation coefficient value of 0.5025, Long Term Liability to Total Assets (LTLTA) with a correlation coefficient value of 0.3050 and Short Term Liability to Total Assets (STLTA) with a correlation coefficient value of 0.3706 as well as size with a correlation coefficient value of 0.3439 increases, the Return on Assets (ROA) of the companies under study also increases which means that the relationship is not strong (i.e., weak). However, the highest correlation coefficient from the table is 78% which indicates that there is no

multicollinearity between the variable. As Brooks (2000), cited in Cathode (2002) opined that multicollinearity is present only if the correlation coefficient is 80% or above.

Table 3.1: Regression Result

roa	Coef.	Std. Err.	t	P> t
tlta	-.251646	2.19375	-0.11	0.320
ltlta	.2770543	2.195138	0.13	0.011
stlta	.2660098	2.192033	0.12	0.018
size	.0018866	.0015705	1.20	0.048
_cons	-.0114198	.0135	-0.85	0.411

Prob > F = 0.0109
R-squared = 0.3257
Adj R-squared = 0.1459

Source: Generated by the Researcher from the Annual Reports and Accounts of the sampled companies using Stata (Version 12)

Table 3.1 presents the regression results of the 1st model equation of the dependent variable (ROA) and independents as well as explanatory variables (total liability to total assets, long term liability to total assets, short term liability to total assets and size). The coefficient of “R-squared” shows 32.57% which indicate that the variables used in the model accounts for about 32.57% variation on ROA as the dependent variable, whereas the remaining of the variation accounts for the outcome of other variables which were not considered by this model. However, the whole probability is positively significant at 10%. As such, the 1st model equation can be inscribed as: $ROA = -.0114198 + .2770543\beta_1 + .2660098\beta_2 + .0018866\beta_3 + \varepsilon$

In assessing the 1st model of the regression equation, the results shows that, the relationship between ROA and is positive and significant, this can be justified with the “t” value of 0.13 and P>|t| 0.011. Similarly the result of the coefficient 0.2770543 is positive, which means that an increase in LTLTA will lead to increase in financial performance of cement companies. This infers that, LTLTA has a positive relationship with ROA. So also the relationship between ROA and STLTA is positive but not significant, which is can be justified with positive “t” value of 0.12 and P>|t| 0.018 which also has a positive coefficient of 0.2660098, this implies that, STLTA has a positive and statistically significant relationship with ROA. Meaning that both long and short term liability to total assets also increased financial performance of the cement companies. The result is consistent with some empirical findings such as Magatitis & Pssillaki (2009); Suleiman (2013) and Goyal (2013). The finding also conflict with that of Saidu (2014) who maintained that capital structure in financial performance of firms’ pension industry has a negative impact on their performances. Finally, the result of size indicate positive with a significant relationship at 5% level of significance on financial performance of the sampled cement companies with a coefficient value of 0.0018866 and P>|t| 0.048, which indicate that the size of the company has something do with it financial performance as used by Garko (2012).

Table 3.2: Regression Result

roe	Coef.	Std. Err.	t	P> t
tlta	-.09314	.79852	-1.01	0.031
ltlta	.46114	.8313	1.01	0.028
stlta	.8143	.75799	1.00	0.033
size	.07759	.037083	2.09	0.054
_cons	-.45193	.31876	-1.42	0.177

Prob > F = 0.0017
R-squared = 0.2512
Adj R-squared = 0.1725

Source: Generated by the Researcher from the Annual Reports and Accounts of the sampled companies using Stata (Version 12)

Table 3.2 presents the regression results of the 2nd model equation of the dependent variable (ROE) and independents as well as explanatory variables (long term liability to total assets, short term liability to total assets and size). The coefficient of “R-squared” shows 25.12% which indicate that the variables used in the model accounts for about 25.12% variation on ROE as the dependent variable, whereas the remaining of the variation accounts for the outcome of other variables which were not considered by this model. It is also positively significant at 10%. As such, the 2nd model equation can be inscribed as: $ROE = -.45193 + .46114\beta_1 + .8143\beta_2 + .077597\beta_3 + \varepsilon$

In evaluating the 2nd model of the regression equation, shows that, the relationship between ROE and is positive and significant, this can be justified with the “t” value of 1.01 and $P > |t|$ 0.028. Similarly the result of the coefficient 0.46114 is positive, which also means that an increase in LTLTA result to increase in financial performance of cement companies. This infers that, LTLTA has a positive relationship with ROE. So also the relationship between ROE and STLTA is positive and statistically significant, justifiable with positive “t” value of 1.00 and $P > |t|$ 0.033 which also has a positive coefficient of 0.8143, which also implies that, STLTA has a positive and statistically significant at 3% level of significance with ROE. Meaning that both long and short term liability to total assets also increased financial performance of the cement companies. The result is consistent with Modigliani and Miller (1958) capital structure irrelevancy theory, which however goes against agency theory that debt is negatively impact on performance. That is to say leverage affects firm performance positively. The findings are contrary to empirical findings of Saidu (2014); Awuyo-Victor & Badu (2012); Suleiman (2013) and in line with Safar, Assif & Arshad (2013).

Lastly, the result of size as a control variable point out to be positive with a significant relationship at 5% level of significance on financial performance of the sampled cement companies with a coefficient value of 0.077597 and $P > |t|$ 0.054, which indicate that the bigger the size of the company the higher the financial performance.

However, using both the two models result to significant impact at significance level of 10% for explanatory variables on the dependent variables (i.e., ROA & ROE) but based on the findings ROE is more preferable than ROA. As such the study adopts ROE as a measure of financial performance of cement companies.

CONCLUSIONS AND RECOMMENDATIONS

The paper examines the impact of capital structure on firm’s financial performance in the Nigerian cement industry. From the result of the findings of the study, it can be inferred that financial performance increases capital structures as thus;

1. There is statistically significant relationship between long term liability and return on assets.
2. There is significant causal relationship between short term liability and return on assets.
3. There is statistically significant causal relationship between return on equity and long term liability in the Nigerian cement industry.
4. There is also statistically significant relationship between long term liability and return on equity.

Based on the findings the paper recommends that cement companies should encourage the use of long term debt in there capital structure since it has positive impact on their financial performance and managers in the cement industry should ensure both long and short term

debt becomes relevant in influencing their performance as measured by return on assets and equity by making proper utilization of the loan capital.

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Revisiting the Financial Year in India

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Abstract

The Ministry of Finance, Government of India, has recently constituted an expert committee to look into the feasibility of changing the Financial Year in India. This has rekindled the debate which is now a hundred and fifty years old. A Financial Year is a period of 12 months used for estimating and analyzing the government's financial accounts. The present financial year in India runs from the 1st April to the 31st March of the following year. It was adopted in 1867 on the grounds of aligning it with the British practice. The Financial Year has been subject to debate for so long considering the fact that it was adopted without taking into consideration local/ Indian customs. The current debate necessitates a re-evaluation of the Financial Year in India. This study has attempted to analyze the issue of changing financial year in India considering the international practices. After evaluating the current dynamics of India, this study suggests for a status quo.

Keywords: Financial Year, Budget, Monsoon, India. JEL Classification: H61, Q58, O53.

BACKGROUND

The "Budget System" in India can be traced back to the second half of the 19th century. It was introduced in India by James Wilson, first Finance Member of the Council of the British Crown. James Wilson gave the first budget speech on the 18th February 1860. The Budget System necessitated that financial estimates of each year be prepared, presented and approved by the Legislative Council. The design of the scheme was spelled out in the Financial Resolution of 7th April 1860. The Budget System in India is therefore, almost 156 years old.

The Mutiny of 1858 had entailed great financial catastrophe. The expenditures of the Government of India outweighed the revenues, 1853 onwards. Deficits accumulated and ran into several million pound sterling. The chronic debt situation was a consequence of the abnormal military expenditure made during the mutiny. The disequilibrium failed to ease off. The Government of India resorted to borrowing. Consequently, the public debt and the interest payments to be made on the same, mounted. Between April 1857 and April 1860, the public debt of India increased by a massive £39 million. The rampant increase in debt necessitated an immediate retrenchment of the military expenditure at the earliest.

The mutiny swept away those systems and institutions which had outlived their usefulness. The new government under the aegis of the British Crown faced the problem of reconstruction of financial system. As the political nature of the Crown overpowered the commercial preoccupations of the East India Company, the defects in the old system of finance surfaced. The budgeting of income and expenditure was imprudent and the accounts ran into mass confusion and consequent to the mutiny the entire system of financial administration became

deranged. Thereafter, financial administration was overhauled. A new system of budgets was enforced; the relationship with the Home (who is home govt) government saw significant changes and changes in the system of taxation were introduced.

The Crown took over the responsibility of the debts and liabilities of the Company vide the Government of India Act 1858. The Secretary of State was entrusted with the responsibility of supervising the expenditure of revenues of the government. His approval was mandatory for the purpose of grants and appropriation of funds. It was mandated that the revenue and expenditure of British India was to be presented in the Parliament on an annual basis.

To ensure transparency and prudence, an auditor of Indian finances was appointed for independent scrutiny of the finances. He was given the authority to call upon the Secretary of State for producing papers related to Indian finances. He could also examine the Government officers in the United Kingdom in relation to Indian accounts. Accordingly, the Secretary of the State was legally bound to present the statement of position of Indian finances in both the houses, annually. The act entailed the annual Indian Budget debate. But the Parliament was rarely called upon to approve the proposed expenditure rather it was merely informed about the accounts of the previous year and current year's revised estimates. Nevertheless, this annual debate kept the Parliament apprised of the Indian affairs.

Meanwhile, the Secretary of State, Sir Charles Wood, having realized the gravity of the financial situation, sent out Hon. James Wilson as Finance Member to India. A financier of great repute, Wilson soon comprehended that the Government had borrowed without restraint and the way out was through the drastic retrenchment and increased taxation.

Only three months after his arrival in India, James Wilson presented his first and only budget on 18th February 1860. This budget detailed the financial situation of the country and listed measures to bring about financial equilibrium. The first Budget expressed the faith Wilson had on the resources of the nation and the ability of the people to develop them to address the urgency in the finances. The document contained multiple taxation proposals. The two principal measures introduced by him were: a tax on incomes above Rs. 200 and a license duty on trades and professions. He also put forth significant measures to reduce military expenditure. Subsequently, Income Taxes Act was enforced amid great apprehension while the license duty on trades and profession was kept in abeyance.

Wilson was a fine architect of finances. He wasn't satisfied with the halfmeasures. His intentions of thorough financial reorganization of India were succinct. He died only after eight months of his arrival in India leaving behind his unfinished tasks at the hands of his successor Samuel Laing.

James Wilson is credited with the establishment of the Budget System in India. The Budget is an annual financial statement concerning estimates of revenues and expenditures for the forthcoming year. The budget document highlights the financial policy of the government. The Budget has been presented before the Parliament every year since 1860. It is from the annual nature of the budgets that the concept of the Financial Year (budget year) emerges. A financial year is a period of 12 months used for estimating and analyzing the government's financial accounts.

The study is designed as follows. Section 2 of the present study elaborates on the various financial years followed by the countries across the world. Section 3 concerns the various

issues and debates concerning financial year in India today. Section 4 details the author's suggestions. And finally, Section 5 concludes with policy suggestions.

INTERNATIONAL SCENARIO

The financial year commences on 1st January for Malaysia, Denmark, China, Austria, Belgium, Brazil and Sri Lanka. It commences on the 1st of April for Japan, U.K., Canada, India and Indonesia and Iraq. In the U.S.A the financial year begins on the 1st of October. Clearly, different countries have different financial years. We have attempted to find out the reasons for selecting different financial years by different countries.

United States of America

In United States there was wide diversity in adoption of the financial year. Many governmental organizations employed the calendar year. Some states like Alabama and Maryland used the 1st October – 30th September term as financial year. Other states like Washington adopted 1st April – 31st March as the financial year. But most of the governments - state, local and federal followed the 1st July – 30th June financial years.

The documented dates suggest that between 1789 and 1842, the federal government's financial year was the same as the calendar year. Thereafter from 1844, 30th June was selected as the financial year ending. The rationale behind the change-over was twofold. Firstly, the mainstay of the local and state government revenues was property tax revenue. And property tax was collected in fall when the farmers sold their crops. It would be inconvenient for a fiscal year to begin early in January and wait till nine months for the main source of revenues for the current year. On the other hand, funds would be collected early in the operating year if a July-June financial year was adopted. This reason is considered to be more or less obsolete now. The other reason is that the legislatures usually convened in January. And with six months in hand before the financial year began, they could debate and decide on the budget to be adopted. Following a calendar year budget would not have permitted this convenience.

Later by the Congressional Budget and Impoundment Control Act of 1974, the budget year was changed to 1st October – 31st September from the year 1976. This was done to allow the Congress more time to decide and arrive on a budget. Ever since, the federal government has followed the 1st October – 31st September financial year.

The state governments might have a financial year different from that followed by the federal government.

Great Britain

The earliest known financial year adopted by the Great Britain ended on the 29th of September, corresponding to the Michealmas quarter-day. Thereafter from 1752 till about 1800, the financial year in Great Britain ended on the 10th of October. The financial year for 1800-01 ended on the 5th of January which corresponded to the usual accounting day in commerce back then. It was in 1832 that the budget was presented for the year to 5th April, 1833. The annual supply grants were voted for the year ending 31st March. But the financial accounts continued to adhere to the 5th January norm until 1854. Thereafter, the Public Revenue and Consolidated Fund Charges Act of 1852 mandated that the Finance Accounts be made up to the 31st of March thereon.

The change in financial year that was effected in 1832 was attributed to the fact that, under the previous arrangement, it was impossible to have the Parliament in session until after the financial year had begun. Post-autumn, it was almost impossible to convene a fresh session

before the Christmas holidays. What happened therefore was that the expenditures were made before supplies were voted in. Thus the change was apt.

Australia

Australian colonies used the calendar year as their financial year in the 19th century. This was seemingly because the calendar year was being used as the financial year in Great Britain back then. Even after Great Britain changed the financial year ending to 31st March in 1832, certain Australian states continued to adhere to the calendar year. The change from the calendar year to a financial year ending on 31st March was pioneered by Victoria in 1870. Thereafter, South Australia, Queensland, Western Australia, New South Wales and Tasmania followed suit.

The change was consequent to a consensus of the states, on the fact that, it was greatly inconvenient to get the Parliament together in the months of November or December. This invariably resulted in the delay of having the allocations sanctioned. In consequence, the payments wanted at the commencement of the year were delayed until later. It was acknowledged that, had the Parliament been in session just before the end of the financial year, the inconvenient delays could have been circumvented. The festivity around the Christmas time made the Parliament sessions then, unsuitable. Most of the people desired to head to their homesteads instead of attending to their parliamentary duties. It was also, suggested that working in the winter months was far more fitting than the hot months of summer. Changing the financial year from the calendar year to the June 30th also made sense because industrial work in the country was mostly done between the months of September to March.

These considerations of climate and convenience resulted in Australia adopting the financial year ending on the 30th of June. Ever since, the Australian financial year has spanned over the 1st of July to the 30th of June.

Iran

Iran's financial year follows the Solar Hijri Calendar. It usually begins on the 21st of March and concludes on the 20th of March of the following year. 21st of March corresponds to the 1st day of Farvardin. It is the first month of the Solar Hijri Calendar and the first day of the spring season. Thus, local customs and traditions guide the choice for the financial year.

Afghanistan

The present financial year in Afghanistan starts from 21st December and ends on 20th December of the following year. It corresponds to the Afghan calendar. Prior to this it used to begin on the 21st of March and close on the 20th of March of the following year. Presumably, the choice of financial year in Afghanistan is governed by local traditions and customs.

A cross-country analysis shows that governments across the globe have no uniform financial year as such. Thus a "global standard" of any kind does not exist. Governments have invariably chosen a date best suited to their convenience.

THE CURRENT ISSUES AND DEBATES IN INDIA

The first known financial year practiced in India commenced from 1st May till 30th April. This was synchronized with the end of the harvest season in the country, 14th April. Thereafter, Foster and Whiffin (1865) had recommended that the financial year be changed to commence from the 1st of January. Although the Secretary of State deliberated on the recommendation in 1866, subsequently it was decided that 1st April was a better suited date for the commencement of the financial year. This effort was aimed at aligning the Indian financial year

with that of the British government. The financial accounts and estimates were routinely sent across to England for review. The alignment of 1867 was expected to simplify matters of administration.

Thereafter, numerous suggestions have been made for changing the Indian Financial. The first suggestions for the change came in as early as 1870. In 1984, the L.K. Jha Committee had recommended that the Financial Year be commenced from 1st January, i.e. the calendar year. But the government has maintained status quo on the matter. Financial Year in India continues to span from the 1st of April to the 31st of March. In recent times, the debate has been rekindled by the appointment of a committee by the Ministry of Finance to examine the feasibility of the change in financial year. Dr. Shankar Acharya, former Chief Economic Advisor has been entrusted with the chairmanship of this committee.

The need for a new financial year in India

The present financial year, 1st April – 31st March, was adopted without taking into consideration local or Indian factors. Thereafter, it has been always argued that the present setting leads to formation of budgets without any knowledge of the ‘South-West’ and ‘North-East’ monsoons that play an instrumental role in defining the socio-economic nature of the nation. Furthermore, the present financial year is also argued to be inconvenient from the point of view of national culture and traditions, optimum utilization of working season and convenience of administrators and legislators. Various expert committees that were set up over the years have voiced their consensus regarding the change of the Indian Financial Year.

Events leading to the setting up of the L.K. Jha Committee

The suggestions for change in financial year had come soon after it was adopted in 1867. Thereafter, the Welby Commission in 1900 and in 1908, on the instruction of the Maharaja of Darbhanga the matter had been reconsidered. Further, in 1914, the Chamberlain Commission, formally known as the Royal Commission on Indian Finance and Currency had recommended that the financial year is made to commence either on the 1st of January or the 1st of November. The Commission held that the existing financial year setting was highly inconvenient because the estimates of the budget were prepared without any knowledge of the monsoons. In 1954, the Congress Session at Kalyani had proposed that the financial year begin from 1st July. In their 20th report, the Estimates Committee had proposed that the financial year commence from 1st October. Lastly, the Administrative Reforms Commission (1966) had recommended various alternative dates with separate considerations for each. But government maintained status quo considering that the disadvantages which would arise out of the change would outweigh the advantages.

The National Development Council rekindled the debate in 1981. Subsequently, the Finance Minister in his Budget Speech of 1984 decided to set up an Expert Committee to revisit the matter of changing the financial year.

Consequently, the L.K. Jha Committee was constituted on the 1st of May, 1984. The main considerations concerning bringing about a change in the financial year revolved around information about ensuing monsoons for proper estimation of receipts and expenditures, the optimal utilization of the working season, suitability from the point of view of national accounts and convenience of the Members of Parliament/State Legislatures, in matters of presenting and passing the Budget or touring of the constituencies. Other considerations include the taxation systems, crop periods and desirability of achieving uniformity in accounting years followed by other organizations like the financial institutions, the cooperatives, etc.

Basic scheme suggested by the L.K. Jha Committee

On the outset it was agreed that the financial year must correspond to the Gregorian calendar instead of the Hindu calendar. It would simplify matters because the former was used by both, the government as well as the business community. Further, the financial year was to commence from the beginning of either quarter. That narrows down the alternatives to 1st January, 1st April, 1st July and 1st October. Most of the countries across the world as well as the organizations within the domestic economy followed either of these alternatives. Lastly, there was consensus on the fact that the centre and state should implement the same financial year. The deliberations in the Jha committee report are discussed below.

Considerations of the Monsoons

The Jha Committee Report held that agriculture being the mainstay of the Indian economy had made monsoons inevitably important to the framing of the budget. And in the existing financial year set up, the budget was prepared without proper knowledge of the monsoons.

The Budget Circular issued to the Ministries/Departments by the Ministry of Finance in September marks the beginning of the Budget process. These ministries thereafter, put forth their estimates of receipts and expenditures after having engaged in several pre-budget discussions, assessment of revenues etc. The final estimates are arrived at by the end of January. This implies that the estimates are calculated without proper knowledge of the Monsoon behavior. Now, Indian Budget, inevitably, has to account for the quality of monsoons when estimating the receipts and expenditure for the coming year. The Budget is not just an account of estimates receipts and expenditure flow for the coming financial year. It also portrays the government's stance on the policies for allocation of scarce resources. This meant that the impact of a bad monsoon on the budget is not just on the account of a drop in the revenues. An ensuing drought might entail additional expenditure on drought relief, higher subsidies etc. Considering that the budget is instrumental in effectively addressing the socio-economic needs of the nation, the report argues that the present financial year hinders the government's responsiveness to it. Thus, the committee urged rightly that the financial year be commenced at a time when the monsoons for the year have been correctly assessed.

The report suggests that calendar year turns out to be favorable in this context. The existing financial year set up puts the government in a spot where fiscal allocations are decided and investment plans are charted in the ignorance of the monsoon rains. But in case the financial year commenced on the 1st of January, the budgetary process could be made to start from October. In October, the performance of the monsoons would have been by and large assessed.

Considerations of the Utilization of Working Season

The working season in India begins post South-West monsoons. The South-West Monsoons span over July to September invariably. The working season thus begins in October and extends up to the next 8 to 9 months till the onset of the next South-West Monsoons. The report asserted that sluggish administration leads to under-utilization of the working season. The allocations made in the budget take time to reach the executive agencies. The works programmes get held up in many areas, for as much as the first three months. Thus, the effective working season is reduced to about six months. Three months are lost to the South West Monsoons and another three to the budgetary process. The suggestion here is to begin the financial year at a time such that it coincides with the South-west monsoons. Alternatively, resolving the lag in the budgetary allocation process could also resolve the issue.

Considerations of the National Accounts

Although the National Accounts are published for the financial year, they are based on data which are compiled on the basis of either of the financial year, the agricultural year or the calendar year. It was believed that having a single accounting period for the data would be advantageous. Crop periods are different for different crops. The crop statistics correspond to the agricultural year which comprises of the rabi and kharif crop harvests. The cooperative year is linked to the agricultural year stretching across July – June. The agricultural statistics pertain to the agricultural year and not the present financial year setting. The Central Statistical Office (CSO) adjusts the agriculture production estimates in the four quarters of the financial year on prorata basis to that of the total production in the financial year. This ensures consistency between the quarterly and annual, GDP estimates. Although, it may be difficult to completely eliminate the variations arising from difference in data collection periods, these fail to pose any significant limitation to the quality or consistency of data. The data pertaining to non-agricultural statistics, particularly the industrial statistics mostly follow the financial year.

In view of the difficulties in synchronizing the agricultural statistics with the financial year, the report suggests that a calendar year would ease the arrangement. It would also be in line with the United Nations statistical reporting practice.

Considerations of Legislator's Convenience

The legislators have the responsibility of touring their constituencies. The report perceived that the existing financial year left the legislators with the inconvenient rainy season for the purpose of touring their constituencies. Thus the suitability of the new financial year from this point of view was to be reviewed.

Considerations of Tax Laws

The impact of the change in financial year would be most felt over the transitional period, the report assessed. But it was widely acknowledged by the Union Ministry of Finance and the State Governments that the changes necessitated in the tax laws, during the transitional period, would not be extreme. Thus with reasonable adjustments, the change-over in the financial year could be conveniently implemented irrespective of the choice of the date.

After deliberations on the various listed matters, the States across the nation were called upon by the Jha Committee to put forth their views. The view point of the states was of utmost importance because the financial year was to be same for both the governments, central and state. The response received after comprehensive discussions held amongst the Chief Ministers and Finance Ministers of various states and the Chairman and Member –Secretary of the committee, clearly pointed out towards an uncontested eagerness for a change.

A significant number of states favored the adoption of the calendar year. The rationale for it was that there would be significant advantages from the point of view of the impact that the monsoons had on the economy. Some states also pointed out that a January-December financial year would lead to fragmentation of the working season. But the committee contested that the issue could be resolved by introducing reforms in administrative and financial procedures.

The following table summarizes the views of the states, registered back then.

ALTERNATIVE DATES	1 ST PREFERENCE	2 ND PREFERENCE	RATIONALE
1st January	Gujarat, Himachal Pradesh, Maharashtra, Jammu & Kashmir, Karnataka, Manipur, Haryana, Rajasthan, Uttar Pradesh	Andhra Pradesh, Bihar, Orissa, Sikkim, Tamil Nadu	Clear idea about the monsoons. With proper administrative reforms, interruption in the execution of works programme could be minimized.
1st July	Haryana, Madhya Pradesh, Meghalaya, Punjab, Andhra Pradesh, Bihar, Orissa, Nagaland, Tripura	Kerala	Happened to be the agricultural year, cooperative year. Minimizes the interruption in the execution of the works programme.
1st October		Madhya Pradesh	Clear idea about the monsoons is available by this time.
Status Quo	Sikkim, Kerala, Assam, Tamil Nadu		Not that April-May had any significant advantage. Apprehensions about dislocation possible on account of adjustment in procedures, tax laws etc.

Source: L.K. Jha Committee Report.

Keeping in view several advantages arising from the change-over, the committee recommended that the financial year be synced with the calendar year. The government, however, decided to maintain status quo on the financial year. The government maintained that there would emerge only marginal advantages from the change-over. Further, the change would disrupt the data collection procedure which might take a long time to return to normalcy. Lastly, the government argued that a changeover would entail extensive amendments to taxation laws and systems and other administrative machinery would get diverted to the problems of transition.

The Present Scenario

Thirty one years have passed since the recommendations of the L.K. Jha committee were rejected by the government. The keen interest that the government has shown in the matter of the change-over recently, calls for a return to the considerations governing the choice of the financial year in the Indian context.

Recently, Niti Aayog has issued a report on the need for changing India's Financial Year. It has reiterated the suggestions of the Jha Committee Report. The details of the report are discussed below.

On the Monsoons

The report believes that although the contribution of agriculture to the Gross Domestic Product has witnessed a secular decline, it continues to play a significant role through its

forward and backward linkages in the economy. And therefore, monsoons continue to be instrumental to the estimation of receipts and expenditures of the government.

The problem with the existing financial year is that by the time the fresh allocations are sanctioned, the impact of the previous South-West Monsoon is already over and by the time allocations reach the executing authorities, the next South-West monsoon is about to begin. Thus the policy measures in the budget are more 'reactive' in nature than 'proactive'.

54% of Indian agriculture is still rain-fed. The moisture retained by the soil on account of a healthy monsoon greatly enhances the production of crops. Further, a good monsoon contributes to various sources of water like reservoirs, ground water, wells, ponds etc. An erratic monsoon generally hits agriculture sector by the way of reduced crop outputs.

Moreover, almost 40% of the entire rural households in the country depend on agriculture for their livelihoods. Thus, the Agriculture sector accounts for considerable work force employment in the country. Agriculture has significant linkages with the headline inflation as well. Given the multifold significance of agriculture, it is the focus of all political attention.

The monsoons in India are highly unpredictable. Even with the best of technological advancements that have happened in the recent times, one can only hope to get an approximation at best. Thus, they agree with the Jha committee report in changing over to a January-December Financial year for the sake of better information on the monsoon behavior, given its crucial nature.

On the Working Season

It had been argued earlier that the January- December financial year will lead to fragmentation of the working season. The report states that slowdown in the developmental and other activities on account of time-lag in budgetary process have been reduced to great extent. The Monsoon does halt the construction works for certain duration. But it will continue to do that irrespective of the choice of financial year. The procedural improvements implemented by the government in recent times, have addressed the issue of sub-optimal utilization of the working season. And therefore, the calendar year poses no serious hindrance to the consideration of optimal utilization of working season.

On National Account Statistics

The report elaborates that there is no reason to doubt that the change in the financial year to any other time would be disruptive of the order of collection of national statistics. The overarching concern is to be able to capture the two harvests, rabi and kharif crops, over the year. And that continues to be feasible in case a change in financial year was effected. The matter was agreed upon by the Central Statistical Office (CSO). Further, the CSO continues to be in favor of implementing a calendar year for the purpose of collection and compilation of data as it is in line with the UN Statistical Office practice.

On Considerations of International Practices

A cross-country analysis shows that governments across the globe have no uniform financial year as such. Thus a "global standard" of any kind does not exist. Governments have invariably chosen a date suited to their convenience. But what does exist in common is the fact that almost all the governments choose the beginning of a quarter as the start date of their financial year. And there appears to be a preference in opting for the calendar year as the financial year.

Most of the Asian countries barring Japan, Thailand, Pakistan and India have adopted the calendar year as their financial year. In South-Asia Indonesia, Philippines, Malaysia, Vietnam etc. have adopted it too.

Furthermore, in most of the countries the Tax year coincides with the calendar year. Thus, many businesses based out of Europe and America, follow the calendar year for their financial accounting purposes.

It is reasonable therefore to assume that the calendar year is the most widely accepted choice for financial year, for the governments and the businesses alike.

On Legislator's Convenience

With the improvement in the overall infrastructure and connectivity in the country in the last few decades, the constituencies are accessible to the MPs and legislators all throughout the year now. Thus, the consideration of the Legislator's Convenience can be delinked from the question of the financial year. Similarly, weather related inconvenience to the legislators in terms of presenting and passing the budget have also been side stepped.

Having said that, neither does the present financial year doesn't bring any particular inconvenience to the legislators nor will a new financial year cause any particular discomfort to them.

On Considerations of National/Local Traditions

In view of the rich cultural and traditional diversity in India, a variety of alternatives would emerge for the financial year. It could be either linked to the "New Year" of the Hindu Calendar. But in context of modern times, a considerable number of citizen associate New Year with the 1st of January.

Alternatively, the new financial year could be linked to the "harvest festivals". The options could be Onam or Pongal/Makar Sankranti. Lastly, it could be linked to the Diwali as the festival is celebrated across the nation, alike. Given the various possibilities, it is difficult to choose one. It is wise rather not to engage in the Hindu calendar for the financial year.

Choosing the calendar year as the financial year, fares better in this context as well because it is reflective of the modern practices of the youth of the nation.

The Niti Aayog's report on the need for changing India's financial year revisits all the considerations made by the L.K. Jha Committee report and advocates its views. It suggests that the government should switch the financial year to the calendar year.

AUTHOR'S SUGGESTIONS

We differ significantly from the stance of the Niti Aayog's report. We suppose that the gains believed to be materializing from the change-over of the financial year are farfetched. Over the many years, since the Jha committee's recommendations, numerous changes have unfolded.

Technology has witnessed rampant adoption in India, in the cities, as well as the hinterlands. An outcome of technological progress, we indeed have a greater clarity of the monsoons and their behavior, if not an exact estimate. Rainfall situation is routinely monitored by a wide network of observatories. The monitoring is done over spatial and temporal scales over the country. The ambiguities associated with a drought or flood like situation have been mitigated

by the early warning indicators through scientific measures. The reactive and relief centric approach towards droughts and floods has been done away with. The focus of the governments, state and central, is on the integrated management emphasizing on prevention, mitigation and preparedness, which has resulted in minimizing loss of lives and livelihoods on account of a drought or flood. At present, redesigning of strategy for agriculture to reduce drought vulnerability and increasing farm income through higher investment in irrigation, access to institutional credit, provision of quality inputs like seeds, fertilisers and pesticides have been put in place.

Some of the States in India have started preparing a separate Agriculture Budget to care of Agriculture sector in a comprehensive manner. .

The fiscal stress to the government in dealing with droughts was because relief measures were given precedence over the mitigation measures. This in turn, put enormous strain on the state budget dismissing developmental plans. But the states in present times have moved on to become comprehensively prepared for untoward situations like drought. The State Disaster Response Fund, supplemented by the National Disaster Response Fund in case of acute emergencies, is a non-lapsable fund provisioned to meet immediate relief expenditure to the victims of drought, cyclone, flood and various other contingencies. Drought resilience is strengthened further by provisioning of additional days of work under MNREGA to drought affected households, diesel subsidy scheme for farmers in affected areas, enhancement of ceiling on subsidy, interventions for saving perennial horticulture crops, implementation of additional fodder development programme, flexible allocation under Rashtriya Krishi Vikas Yojana and other centrally sponsored schemes and framing of a crop contingency plan.

Additionally, introducing participatory democracy, laying out location specific crop contingency plans and focusing on long term drought proofing programmes e.g. watershed development, water harvesting etc. has gone a long way in addressing the woes of the unpredictable, insufficient monsoons.

Further, various schemes like Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), Krishonnati Yojna aim at extending irrigation coverage and improving crop husbandry ensure that rural incomes are safeguarded and rural development is strengthened. Lastly, the Pradhan Mantri Fasal Bima Yojana scheme has been introduced to make crop insurance easily available to farmers.

Thus, the crucial role that the monsoons used to play in the framing of and in deciding the impact of the budget seems to be blown up in today's times. The government has exhaustively attempted to blunt the exposure of agriculture sector output to the erratic monsoons. The impact of a bad monsoon is almost always taken into account and factored in while allocating fund while framing the budget.

The governments, state and central, are no longer in a limbo. They have dynamic research and analysis teams. Factoring in of changing circumstances is fast and responsive. The focus is on completion of on-going major, medium and minor irrigation projects along-with installation of Mega Lift, Shallow and Deep Bore Wells and Micro Irrigation facilities to optimize water use efficiency.

Steps have been taken for crop diversification from cereals to pulses and millets, revitalising the extension system for transfer of advanced technology, strengthening of market linkages through financing, storage and transportation, risk mitigation and value addition.

Thus, in view of the present setting, the role of monsoons in deciding the financial year is at best passive, if not redundant.

In context of considerations of the utilization of working season, significant changes have become common place. The State governments have introduced the Integrated Financial Management System (IFMS) with the intention of automating and computerizing the budget execution and account operations. Under IFMS, the major initiatives taken by State Governments include Electronic Payment System, e-Government Receipt Accounting System, State Public Procurement Portal, Integrated Human Resource Management system and few others. These systems ensure real time transfers. The IFMS is entirely web based facilitating state wide financial transactions and efficient monitoring. The previously required manual checks of receipts and their expenditures have been done away with. Now the treasury and the Finance Department have a clear picture of the total budget expenditure on a daily basis. This ensures seamless data flow across the system, so that the implementing authorities make well-informed decisions.

Furthermore, the centralized electronic payment channels ensure that the funds reach the implementing authorities in real time. Thus, the time-lag that plagued the system and caused works programmes to get delayed in the first few months of the financial year have been successfully circumvented. However, the slowdown in the construction works on account of monsoons cannot be avoided.

The collection of national statistics as on date doesn't show any signs of inconvenience. Although, it is not aligned with the UN Statistical office practice, the existing practice doesn't warrant any immediate redesign. Likewise, the consideration of the financial year not being in sync with the local or Indian customs can be ignored. Owing to the diversity of the cultures and traditions in India, it is best not to engage in choosing one of the many possible alternatives.

With the great strides of development that transport and communication have taken in the recent past, the convenience of the legislators in touring their constituencies is no longer a concern. Fair weather roads and telecommunication connectivity ensures that they have desirable access to their constituencies all-round the year.

Besides, India is on the threshold of changing over to a multi-year budget framework. Many states are examining the feasibility of implementing a medium term fiscal strategy. In these changing times, the considerations that at one point played a decisive role in the choice of a financial year in India are losing relevance.

CONCLUSION

The detailed discussion above points out that the need for changing the current financial year is avoidable. The responsiveness of the Government is adequate as the uncertain nature of monsoons are anticipated and factored in while formulating budgets.

The importance of monsoons in agriculture and thereby the lives of several people employed in agriculture is undeniable. But modest understanding of the monsoon behavior has considerably improved the investment planning and budgetary allocation procedures. Over the years, the quality of planning has considerably improved and states are abreast with advancements in technology, thereby bringing about tremendous transformation in the development of the rural populace.

A change in financial year entails engaging in making amendments to taxation laws and systems and financial procedures concerning authorization of expenditure. In consequence, the administrative machinery would have to be diverted towards these problems of transition. Instead, it would be more judicious to redirect these administrative systems towards the successful implementation of the Goods and Services Tax (GST). Successful implementation will raise the tax efficiency of both national and sub-national governments. The implementation of GST calls for the standardization of systems and procedures across the country. This includes the tax payer registration system, tax reforms, tax reporting periods, taxpayer identification numbers, cross border trade information systems and IT systems. The overhaul of the entire machinery would require massive training efforts, at the central and the state level. So, a diversion of administrative machinery to this effort would be favorable, given the potential of the GST to bring in many economic benefits.

Furthermore, the government is mulling over switching to a multi-year budget framework in the near future. The multi-year budget is unique because it allows long term interlinking of current year budgets with future years' expenditure requirements. Thus, it would provide a platform whereby perennial fiscal problems could be resolved by matching the government's expenditure commitments to the resources available. It will improve long-range and strategic planning. Introducing the medium term approach to budget formulation would help prioritizing expenditure commitments in line with the fiscal strategies. This would improve resource allocation. Moving away from the annual budgets would necessarily blunt the impact of a choice of a particular financial year.

Considering the recent developments in the economy, we believe that the need for a change in the financial year of India is escapable. Thus, maintaining status quo instead of engaging in the cumbersome task of changing the financial year appears reasonable.

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Investigate Students' Attitudes toward Computer Based Test (CBT) at Chemistry Course

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Abstract

Computer Based Assessment (CBT) is being a highly widespread method to assess students' fulfillment at the university level. This study seeks to examine the attitude of the students towards computer-based test (CBT) at the KAU - Saudi Arabia Jeddah. Quantitative approach using survey questionnaire was adopted to carry out the current study using convenience-sampling technique. The sample consists of (60) undergraduate students who had taken the exam on CBT were selected from college of science - chemistry department to examine their perceptions towards CBT. To achieve this aim, the researchers examine the possibility of using student feedback in the effectiveness of this method in assessment. The findings show that: the majority of respondents have positive attitude towards CBT, (83.7 %) of students said they were competent with the use of computer due to their prior experience. Regarding test administration, they reported that there are some errors in the chemical equations, formulas, construction in the exam sections, and inadequate time. Nevertheless, they achieved the exam successfully and reached satisfaction through CBT features such as direct scoring, validity, and transparency in grading. The bottom line, CBT experience will become favorable for students and then will earn its effectiveness in the context of assessments methods.

KEYWORDS: Computer Based Test (CBT), Chemistry course, Undergraduate Students, computer experience.

INTRODUCTION

Over the past four decades, there has been gradual evolution in computer-based testing (CBT) as a viable alternative to paper-and-pencil testing (PPT). However, the transformation to CBT is neither simple nor cheap. Student assessment is a quite fundamental factor in every learning paradigm. Teachers' evaluate students and learning outcomes to direct and encourage them according to their fulfillment (1). It is mostly known that examinations determines the extent to which educational goals have been accomplished as well as the extent to which educational institutions have served the needs of society (2). Examinations are not only limited to measure educational needs or societal objectives but also incorporate in a way of coping with the educational system (3).

According to Rehmani (2003) examinations play an important role in determining what goes on in the classroom in terms of what, and how teachers teach and students learn and can have effect on both teaching and learning' (4) . Several examination modes utilized in higher education institutions to assess academic progress, for instance, paper-pencil-based examinations, assignments, presentations. Sim, Holifield, & Brown (2004) identified more than fifty different techniques used within higher education for assessment purposes; the most commonly used are examinations (5).

The rapid advancement of Information and Communication Technologies (ICT) in teaching and learning has shifted the paradigm (6) from paper-pencil-based to computer-based system of examinations which are usually termed as Computer Assisted Testing, Computerized Assessment, Computer Based Testing (CBT), Computer Aided Assessment (CAA), Computer Based Assessment (CBA), Online Assessment, E-Assessment and Web-Based assessment [(7); (8)].

Computer – based tests (CBT) are the form of assessment in which the computer is an integral part of question papers' delivery, response storage, marking of response or reporting of results from a test or exercise (9). Conole and Warburton (2005) defined CBT as 'the use of computers for assessing students' learning' (10). It is required to think, re-consider, and modify or change the traditional test manners. Electronic assessment tools had reduced the load of teachers and facilitate exams execution purposefully because of inclusion of ICTs in education. CBTs can be applied to promote further efficient learning by examining students' knowledge and understanding in many fields such as chemistry courses.

Students' prior experience in computer and communication skills is essential matters in CBTs. CBT are a method that may does not suit the learning styles of many students. The primary factor in determining whether an assessment program is beneficial or not depends on whether the assessment tasks are relevant to the purposes and learning outcomes for the course, not forgetting the attitudes and skills that are to be examined. For this, we will try in this study to investigate students' perceptions and their attitudes towards this kind of exams, and to identify the technical and scientific issues that they face. Computer and related technologies provides a powerful tools to encounter the challenges of designing and implementing assessments modes that go beyond the conventional practices and facilitate accessing a widely sources of information , cognitive skills and knowledge.

Computer based assessment technique is becoming more and more widespread in HEIs. According to Conole and Warburton (2005): "CBTs are written to test specific levels of ability they have the potential to deliver more accurate and reliable results than traditional exams" (10). Traditional methods of assessment are being changed by automated assessment in all over the world progressively but it is not clear so far to up to what extent these changes will be fruitful to the academicians and administrators of HEIs, in addition to that, institutions across the globe are migrating toward the use of (CBT) to test students' knowledge (11).

Therefore, it was significantly important to perceive university students' perceptions towards Computer-Based examinations. It was noticed through literature that little interest was paid to understand students' thoughts about CBTs in terms of their attitudes in terms of their role in assessing the responses of students taking CBT in chemistry course. Authors of this research, thus, analyzed students' attitude in different dimensions, i.e., gender, age, academic level, academic performance, and prior experience in computer, computer anxiety, and constraints on the utilizing of CBT. The present study aims to identify the attitudes of those level students towards CBT and analyze their perceptions in terms of the above dimensions.

The paper is organized as follows. In Section (2), a brief literature review that summarizes the studies of those authors who experimented or surveyed CBT in different courses at HEIs. Section (3), a review of theoretical background of CBT is presented. Section (4) explains the importance of the study. Study problem is presented in Section (5). In Section (6), Purpose of the study is determined. In Section (7), Study questions were addressed. Section (8), explains the research methodology. In section (9), data analysis and discussion of results are shown.

Finally, conclusion, study limitations, and future studies were included in Section (10), section (11), and section (12) respectively.

PREVIOUS STUDIES

(Powers & O'Neill, 2006), assessed the degree of contribution of CBT to performance among a number of students of mathematics by using a questionnaire survey. It was found that no serious effect (12). Karadeniz (2009) studied the impact of CBT and PPT and mobile-based test on students' performance. A group of 38 students was experimented for 3 weeks. Significant differences were found between the scores achieved by the students in second week, but not in first week. It was perceived by the authors that students had positive attitude towards CBT and assessment due to ease of use, comprehensive and instant feedback. Moreover, most favored the CBT and the least favored were the PPTs (13).

The National University of Singapore introduced computer-based testing (CBT) in 2004. Lim, et al (2006) examined medical students' attitude about CBT VS PBT testing. Through an online survey 213 (53.5%) final-year students were tested out of which 91 (79.8%) preferred CBT, 11 (9.6%) preferred PPT format and 12 (10.5%) were un-sure. Authors further explained that 42 indicated that 42 liked CBT because of good quality of images and independent of assigned seating positions; 22 liked because they could proceed at their own pace; one stated that CBT examinations was fun; 4 enjoyed the convenience of CBT and 6 cited "equality" as the reason they preferred CBT over PPT

The major factors leading to difficulties in CBT applications under two titles, as factors resulting from "users" and "technology used". He states that the user's gender, the ability to process information, the ability to use a computer, and the level of anxiety could have an influence on an application (14).

Many researchers have already done studies investigating the relationship between computer usage ability and achievement tests. Yurdabakan (2012) (15) identifies some of these studies [(16); (17); (18)] stressing that computer usage ability is an important predictor of respondent achievement; therefore, those poor students at computers may show low achievement in CBT. However, they added that with the increase in computer technologies and access opportunities, such problems might decrease.

In some of the studies investigating the difference between assessment methods in terms of gender, race and age, such as (19), no significant difference was found in achievements, whereas in some other studies (20) little significant difference was observed. In their recent study, Terzis and Economides (2011) describe the trends of male and female students towards CBT (21). Yurdabakan (2011) reported that as a result, they highlighted both genders having positive views on CBTs, if they are based on games; they are open and course-related (15). Additionally, they state that the attitudes of males and females towards CBTs are under the influence of social environment; the boys focus on the usefulness while the girls stress the ease of use.

Study of (Williams ,2007) he examined attitudes of pre – hospital undergraduate students undertaking a web based examination as an adjunct to the traditional paper based examination mode using questionnaire survey among (94) students, the study found students' satisfaction and performance is high (22).

(Ozden et al. 2004), in his study "students' perception of on line assessment". Questionnaire and interview among (46) students were utilized. The findings indicated that students'

perceived as an effective testing mode (23). Using content analysis, (Johnson et al .2004), examined the relationship between assessment mode and students' perception. The results shows that computer based questions seems to be harder than if it were to be in paper based questions (24) . (Russell et al.2003) the purpose of the study is" investigated reasons behind low performance in CBT" .By using a survey, he concluded that the low performance can be attributed to inability to practice / review old exams / questions (25).

(McVay, 2002) "Examined disparity in students' performance between CBT and PPT testing modes". By Using compares performance of the same students using the two modes as a research method, the findings of this study indicated that disparity exists (26). A study was conducted by (Millsap, 2000) to investigate likely disparity between the two testing modes among (585) military recruits. Content analysis method was used. It was found that the testing method did not affect the results (27).

STUDY BACKGROUND

Because of growing number of teachers and students who use computer technologies in classrooms to support or execute the instructions, it is expected that the schools and HEIs will shift the technology use in assessment also. Computer-based tests (CBT) contain assessments that are carried out using the computer, either over computer program or over a web-based system. Already, many assessments have been switched into a computerized format, including summative, large scale, and daily formative assessments (28).Increased student motivate, enhanced reliability in data gathering, and quick reporting of results are some of the evident advantages to CBTs [(29); (30)].

Information and Communication Technologies (ICTs) have been advanced rapidly and widespread, utilized for different purposes, and used intensively in schools and higher education institutions (HEIs) in several sides like students' assessment and e - learning as well. CBT systems are carried out by using the tools of ICTs and its applications. A CBT system is seen as a very significant instrument to assess students' knowledge at particular stage and to assist learners in identifying the gap between requested criteria and the actual standard for them.

Studies have also found that students enjoy taking CBTs and are motivated by the use of technology [(31); (32)]. Accessibility features can be conveniently embedded into CBTs, allowing for supports and accommodations such as glossaries, color contrast, text-to-speech, spell check, highlighting, and Closed-captioning (18) .The quick reporting of results is particularly useful to educators as they are able to access and use these results to make timely changes in instruction if necessary [(18); (33); (30)]. CBTs can easily administer exam timing, and ensuring that all students are given the same amount of time to accomplish the exam. CBTs can also permit students to have access to the same support tools, including calculators, dictionaries, and only let the use of those tools when it is suitable (31).

In addition, the benefits of CBT ensure easier administration; bring down printing costs and paperless distribution, increased exam security, fast feedback, and integrated support instruments (34). With all of these benefits, it is easy to see why many HEIs and high schools are employing the use of technology for assessments. As CBT launched to be utilized for summative assessment, investigating students' attitudes towards CBTs became significant. From students' perspective of the CBT, there have been a number of mixed responses. Previous literatures presented that more individuals expected problems with the computer supported assessment than really had them (35).

Despite few students being confident about CBT before completing the assessment, more students stated a preference for CBT thereafter, previous study conducted indicated a preference for CBT over PPT (36). Some studies reported the main disadvantage as being increased anxiety amongst those unfamiliar with use of computer [(35); (36)] and as such students agreed that they are "technophobic".

The major challenges to test examinees through computers demand a proper software designing. To confirm this request, students' attitudes and perceptions on the advantages and disadvantages of a computerized test are significant, as the user, perceptions and his opinions are critical in the approval, application, and advancement in computerized tests. Moreover, while recognizing the system level usefulness that associated with CBT it is significant to generally, different fields are worthy to investigate in this area, including problems concerning the factors that may affect performance and student perceptions regarding the CBTs.

These evolutions in computers and ICTs have affected several fields including educational assessment and examinations and significantly reshaped the manner of assessment and exams mode. This has led to the development of (CBTs), and/or computerized adaptive test applications, besides those traditional paper-pencil tests (PPTs). In many academic fields, educational measurement has been moving towards the utilizing of CBTs, which defined as exams or assessments that are Managed by computer in either stand-alone or dedicated network or by other technology devices linked to the internet or World Wide Web (www) most of them using multiple-choice questions (37).

There are two main types of assessments systems: Paper Based Test (PBT) and Computer Based Test (CBT) (1). Due to the popularity of ICTs, many schools and institutions replacing the traditional paper and pen assessment for learners. Students prefer CBT instead of PBT as they think that CBT would be interactive, exciting, accurate, secure, credible, and smooth (38). Also, several competitive advantages that CBT has such as less cost, more security, and high accuracy. Furthermore, it minimizes the required efforts to accomplish tasks, and time for test preparation, marking, scheduling, recording and analyzing the results [(1); (39)].

At present, in the Saudi universities the most applied evaluation of students' knowledge is traditional method that is a combination of essay and practical tests. Nevertheless, in the past few years, the number of students increased significantly, the traditional examination method consumes a long time for evaluation and assessment. An automated testing system is the solution of examination for large classes to address these problems and other issues.

As now computer-based tests are launched to be applied especially at primary and secondary education level, for such reasons like: their exam results are scored immediately and reported in detail, their applications are effective and reliable, flexible, they reduce the costs for long-term, make the integration of audio-visual materials is possible, and enable the rater to easily adjust the student response time compared to traditional PPT (40).

Therefore, the actuality that students' perception of CBT for chemistry courses is under investigation subject. This study describes results in this field with a view to expand better practice, guidelines, and models of application and valuation of a specific kind of exam mode, namely CBT for undergraduate chemistry courses. Examine the relationship between assessment method and the behavior of the students being assessed.

Finally, CBT is being a major part of e - learning and assessment systems in HEIs and schools alike.

Therefore, it is very important to investigate the factors that affect the students' attitude toward using CBT in order to implement CBT systems successfully. The aim of this research is to examine the factors that influence the students' attitude toward using CBT system in Saudi.

IMPORTANCE OF THE STUDY

Computer Based test (CBT) is being a very popular method to evaluate students' performance at the university level. Even though mode effects of different formats of assessments have been conducted for decades, it is important to continue the line of research. As the availability of technology in classrooms increases, and as teachers and students become more technologically wit, it is fundamental that they understand how transforming from paper-based to computer-based tests may have an impact on student perceptions and their performance. This is of particular importance when teachers have the capacity to produce their own computer-based texts of assessments that are used between students and classrooms and are applied to make instructional decisions.

This study also evaluates the responses of students taking CBT. These issues and others worth a consideration such as students' attitudes towards computerized testing may promote or impede the testing process. Therefore, it is essential for us to be aware of the accompanying affective impacts of CBTs, which is still not understood yet. The attitudes that students have, are an important factor in whether CBT programs become an efficient part of the curriculum of schools and HEIS alike. Awareness of what attitudes students' hold can help educators in curriculum designing in evaluating the role of computers and prior experience in CBTs, and in the future local development of a curriculum that incorporates the computers usage.

This study also contribute to the existing knowledge about the relative contributions of previous computer – related experience on computerized testing performance ,as well as on examinees attitudes and acceptance the use of computers in testing. Furthermore, a study such as this will hopefully assist in the evaluation of CBTs, in order to minimize factors that may inhibit optimal achievement performance. If CBT is well accepted by students, and with constantly improvements being made in the design of software, it may become an obtainable mode of assessment in our schools and universities better.

STUDY PROBLEM

Investigating students' perceptions and attitudes towards CBTs is not an easy matter. According to their personal abilities scientific or technical, so there are many different views on this issue. Some of the examinees through computerized tests notified that it is more difficult for them to navigate back to rework problems. Others are reluctant to the computerized testing method simply because they are accustomed to take notes, writing comments, and circling question and/or answers for later review (41). Others said that they read more easily and quickly on paper than on a computer screen.

While the computer crashes are rare to happen, but it is expected to occur through the exam time, this can void the efforts of examinees [(18); (33)].

Students' attitudes about performance grades, exam appropriateness, validity control, and computer anxiety are generally the points of concern. Some test takers have a general anxiety about the computer itself, while others are more worried about whether their level of computer experience

(42). All these conflicting attitudes serve as the reasonable grounds for this study.

Use of the mouse, screen visibility, screen size, screen resolution, font size, display rate, and Scrolling are some technical issues in CBT that affect students' response to the designed chemistry questions according to (Jimoh et al.2012), also presentation graphics and the User interface layout has been known to affect examinees as they may have difficulty with particular aspects of it , or they may object to specific element of adaptive exam delivery (43).Therefore, it is anticipated that providing certain information about students' perceptions about CBTs in undergraduate chemistry course might enable the stakeholders to make improvements of the current use of CBT system. These issues and others are captured in the survey questionnaire tool of the current study.

PURPOSE OF THE STUDY

The main objective of this study is to " investigate students' perception towards CBT for testing Undergraduate chemistry courses in Saudi Arabia". It also supports exploring the factors suits CBT in Saudi HEIs. In addition, here are some more objectives related to the statement of this research.

1. Identifying the overall constraints on the utilizing of CBT for the chemistry courses?
2. Explaining the factors that influence students' attitudes to assessment method?
3. Examining the relationship between prior computer experience and performance in CBT?

STUDY QUESTIONS

To address the problems specified in this study, three sub questions were addressed as follows:

1. QUESTION ONE (Q1): What are the overall limitations on the utilizing of CBT for chemistry Courses?
2. QUESTION TWO (Q2): What are the factors that affect students' attitudes to assessment Method?
3. QUESTION THREE (Q3): What is the relationship between prior computer experience and Performance in CBT?

METHODOLOGY

Many previous studies were reviewed, it is obvious that quantitative approach using survey Questionnaire is most suitable process of examining students' perception about CBT [(22); (44) (23)].Accordingly, the researchers will use the same methodology for the current search using a questionnaire developed for this purpose. A five-point Likert-type scale of agreement running from (1= Strongly Disagree, 2= Disagree, 3= Uncertain, 4= Agree and 5= Strongly Agree) were adopted. Before the questionnaire was conducted, it was pretested on ten students in order to measure the construct validity of the perception measurement. Furthermore, the questionnaire was validated through a number of specialists in this field, there comments were considered in the final version.

Study Population

The target population for the current study includes all undergraduate students in chemistry department at King Abdul-Aziz University (KAU) - college of Science, Jeddah City.

Study Sample

In the sampling technique, the study is based on a convenience sample of (60) undergraduate students who taught chemistry science in KAU, from May – October 2016. (60) Questionnaires were distributed randomly in the university main campus in Jeddah city, (54) questionnaires were collected; five of those were discarded because they were incomplete. (49) found usable for this study. The Tables (1), (2), (3), (4) and (5), show the distribution of demographic characteristics of the sample.

Table (1): Respondents' profile according to their Sex

Respondent Sex	Frequency	Percentage (%)
Male	31	63.3
Female	18	36.7
Total	49	100 %

Table (1) indicated that out of (49) respondents, (31) were male with percent (63.3%) while (19) were female with percent (36.7%).

Table (2): Respondents' Respondents' profile according to their Age

Respondent's Age	Frequency	Percentage (%)
Less than 19 years	7	14.286
19 – 21 years	18	36.735
22- 24 years	16	32.653
25 – 27 years	8	16.326
Total	49	100 %

Table (2): The sample shows that: (7) student with percent (14.286 %) were less than (19) years, (18) students with percent (36.735 %) aged between (19 -21) years, (16) students with percent (32.653 %) aged between (22- 26) years, while (8) students with percent (16.326 %) aged between (25 – 27) years. Also, illustrates that the respondents is highly controlled by the age groups of (19 – 21) years and (22- 24) years as well. These figures show that an age group of respondents from the average age group of students. This indicates that the mark gained in the CBT is accurate, and students' cognitive capacity has improved.

Table (3): Respondents' profile according to their academic performance

Academic Performance	Frequency	Percentage (%)
Excellent	9	18.367
Very Good	25	51.020
Good	13	26.531
No response	02	4.082
Total	49	100

The sample study appears that (9) students with percent (18.367 %) were academically excellent, (25) of them with percentage (51.020 %) were very good academically, (13) students with percentage (26.531%) were academically good, while (2) students with percentage (4.082%) did not reply. The table also presents that a significant percentage of respondents are performing either very good or good academically. Low or high trend in the results obtained by some students in a CBT can be attributed to external factors or examinee himself. In general, as results show the majority of respondents have high attitude towards the adoption of CBT.

Table (4): Respondents' level of prior experience and familiarity in computer

Respondents Scales in computer experience	Male		Female		Together	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage

High	15	48.387	9	0.5000	24	48.980
Average	11	35.484	6	33.333	17	34.694
Low	5	16.129	3	16.667	08	16.326
Total	31		18	100%	49	100%

The study sample indicated that (24) students with percentage (48.98%) together (male and female)

Responded that they own high computer experience. (17) Student with percentage (34.694 %) said that their computer experience is average, while only (8) students with percentage (16.326%) admitted a low experience in computer. Findings also illustrated in the above table that the majority of them have a high experience in the computer. By considering the efficacy of the prior experience in computer on the performance of students out of their CBT, system in the university is insignificant; as such, students without any problems will achieve tasks easily.

Table (5): Respondents' profile according to their academic level

Level of Study	Frequency	Percentage (%)
1st.year	4	8.163
2nd.year	16	32.653
3rd.year	18	36.735
4th.year	11	22.449
Total	49	100 %

The table shows that majority of respondents have spent two academic semesters at least in the university. (4) students with percentage (8.163 %) are in the 1st.year , (16) students with percentage (32.653 %) are in the 2nd.year , (18) students with percentage (36.753 %) are in their 3rd. year , while (11) students with percentage (22.449 %) are in 4th.year. This shows those students' responses to questions will considered well aware having spent more than one academic semester in the university, this also indicates that they have taken the CBT exams many times. Overwhelming percentage of the respondents fall within the level of 2nd. Year and 3rd.year, which means they accepted to have the CBT in their academic courses in general.

DATA ANALYSIS AND DISCUSSION OF RESULTS

Study Questions Analysis

the 1st . study question (q1)

What are the overall limitations on the utilizing of CBT for chemistry courses?

The aim of the first question is identify the most common constraints that associated with CBT for chemistry courses. To answer the question, respondents were asked about the constraints that faced them when they use the CBT for chemistry course examining. Table (6) shows the findings in frequencies & percentages.

Table (6): Limitations on the usage CBT in chemistry courses.

Constraint	Frequency	Percentage (%)
System Security	5	10.204
Software access	4	8.163
Answers Submitting	13	26.531
Log in Problem	5	10.204
Answers Editing	7	14.286
Do not have any of above problems.	15	30.612
Total	49	100%

Table (6), indicates that (30.612%) of students do not have any of above listed issues. (26.531%) of them said they had problems in their answers Submitting. (14.286%) faced problems in their answers editing. (10.204%) encountered difficulties in system security, followed by (8.163 %) had issues with logging on to their portal.

THE 2nd. STUDY QUESTION (Q2)

What are the factors that influence students' attitudes to assessment mode?

Ranking students' attitudes towards the CBT test to understand the prime issues concerning CBT is the aim of this question. To answer the above question, respondents were asked with several scales on the administration of computerized test. A five-point Likert-type scale of agreement running from (1= Strongly Disagree, 2= Disagree, 3= Uncertain, 4= Agree and 5= Strongly Agree) were adopted as shown in Table (7).

Table (7): Respondents' attitudes toward CBT

Item	1	2	3	4	5	Total	Mean
CBT was very efficient	4	17	20	78	29	148	3.02
CBT provides me a positive experience	5	12	22	90	27	156	3.18
The CBT causes me a concern	3	24	47	33	32	139	2.83
CBT exam was conducted in a helpful environment for Examinees.	2	9	7	50	130	198	4.04
CBT is better than PPT	10	27	44	9	21	111	2.26
I prefer CBT compared with PPT	11	31	40	18	24	124	2.53
I believe that CBT ensured justice and equity.	13	18	27	30	41	129	2.63
I prefer receiving my exams results automatically utilizing the CBT system	3	15	14	61	83	174	3.55

Results in the above table shows that from the respondents' perspective, the most widespread status with the CBT management is the success it made in the item "CBT exam was conducted in a helpful environment for examinees" with mean of (4.04), followed by the item "I prefer receiving my exams results automatically utilizing the CBT system" has been specified to be the following utmost important item with Mean (3.55), this means that CBT has attracted the majority of examinees' awareness and seen as a positive attitude.

As specified by examinees, they admitted in the item "CBT provides me a positive experience" with mean (3.18). The item "CBT was very efficient" came after with its mean of (3.02). Respondents did not agree on the item "CBT is better than PPT" as it has the minimum mean of (2.26).

THE 3rd. STUDY QUESTION (Q3)

What is the relationship between prior computer experience and performance in CBT?

To answer the above question, respondents were asked if they feel prior computer experience has effect on their test score. The response was on a five-point Likert Scale. The responses are presented below in table (8).

Table (8): Respondents' opinion on the impact of prior computer experience on performance.

My previous experience in computer influence on my performance	1		2		3		4		5		Total	Mean	S.D
	n	%	n	%	n	%	n	%	n	%			
	5	10.204	6	12.245	7	14.286	23	46.938	8	16.327	49(100)	3.199	1.249

From the above Table above (46.938 %) of students agree that " previous experience in computer influences their performance (test score) ", (16.327%) of respondent were strongly agree, (14.286%) of respondents were uncertain, (12.245%) disagreed and only (10.204%) strongly disagreed with this statement.

CONCLUSION

From this study, it has been observed that students' in general are becoming more interested in the use new method of assessment, which is the CBT. Therefore, CBT should be initiated in all levels of educational assessment in HEIs and schools alike.

The result likewise show that the helpful environment provided by the system and receiving results automatically using the CBT system is an advantage of the new system. It is concluded that there is an urgent need for basic training on the use of computer before exposure to CBT mode of assessment to enhance the students' attitude towards computer-based exams, and remove the concerns they have relating to their final grades.

Regarding the questions of chemistry exam, the findings of this study revealed that, inadequate test time and mistaken questions were among major reason of students' failure with CBT mode of assessment due to the nature of undergraduate chemistry courses. It is recommended that the exam questions should be free of errors and students have enough time to answer the examination.

STUDY LIMITATIONS

Three limitations have been specified for this study. [1] Lack of Arab studies in this area; [2] All students were already familiar with the PPT format; the CBT format was new for all most all students particularly in scientific courses such as chemistry. Giving students adequate training (demo exam) will push them for more confident, eliminate computer anxiety, and enhance performance and attitudes towards the CBT as well; and [3] the time and sample size. This study was carried out through summer semester 2016; therefore, the results cannot be generalized.

FUTURE STUDIES

The results of the current study add to the literature basis concerning attitudes towards CBT. Accordingly, it is necessary to investigate the use of computer-based classroom assessments, which is lacking in the existing literature. integrated administration and timing easily translate to a CBT construction, as does feedback, analysis, and automate grading through CBT, Due to the attraction of this choice, it is significant to extend the research on assessment method impact of CBT in all educational fields and discuss how variation in exam formats can influence on performance and enhance the attitudes towards CBT between examinees.

Further studies are also needed regarding practice with CBT. Most of the existing studies compare assessments given on CBT and on CBT with restricted attempts. Based on students' ability and the use of technology in their classrooms, this might have been one of the few opportunities to use a computer for an assessment. A study that allows practice in the CBT format over time would give some idea about how practice may or may not change the difference in results based on format.

Along with this direction, future studies that focusing on rising computer and keyboarding skills would be worthy. Finally, additional research is needed with a wider domain of students' ages, gender, their levels of study, and grade level. Expanding research in such variables would allow for further in-depth researches in this trend.

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Human Capital, HRM Practices and Organizational Performance in Pakistani Construction Organizations: The Mediating Role of Innovation

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Abstract

Human capital and human resource management practices play a vital role in success of any organization. When employees feel satisfy with human resource policies of an organization they give their best to increase the organizational performance. Construction industry provides job opportunities to large number of people in all over the world. In Pakistan, construction industry is making progress with rapid rate. To investigate the importance of human resources in organizational performance, a research was carried out to check the influence of human capital and human resource management practices on organizational performance with the mediating role of innovation in construction industry of Pakistan. The data for this study was collected from the 315 employees from construction companies of Pakistan through structured questionnaires using simple random sampling. Data analysis technique like structural equation modeling was applied using SPSS AMOS. The findings indicated that human capital and human resource management practices are positively associated with organizational performance. Also, innovation mediates the relationship between independent variables (human capital & HRM practices) and organizational performance in construction industry of Pakistan.

Keywords: Human resource management, Organizational performance, Innovation, Construction industry

INTRODUCTION

In this dynamic and competitive environment, organizations are in need of investing and supporting their human capital to remain and sustain in competitive advantage. Now-a-days, organizations are facing aggressive and productive environment. The success of these organizations is heavily depending on their capacity and ability to adapt their structures able to face the competition and maintain positive relations with their surroundings. This is especially for the construction organizations where worker's cost and productivity are the main elements of gross profit.

Buller and McEvoy (2012) stated that in these days human capital is considered as critical success factors for every organizations' development and for running smooth business. HRM is related to the managing organization's workers includes training and development, planning, performance measurement career development, staffing, compensation and benefits, leaving the organizations. So, HRM in construction organizations is a complex and manifold activity that concerns with the application of ideas.

However, its significance in the construction environment is still undefined. On the one hand, many literatures and studies have identified HRM as a major factor towards organizational performance (Barczak & Wilemon, 1992; Tampoe & Thurloway, 1993). Investment in HRM improves the quality of human capital, results the high productivity that in turn high profitability. This study aims to evaluate the role of HRM in construction organizations in the economy of Pakistan with the linkage of innovation. The role of human capital on organizational performance is not clear. Thus, the efforts of the study are used to investigate the impact of human capital of organizational performance with the mediating effect of innovation.

OBJECTIVES

1. To investigate the association between HRM practices and organizational performance.
2. To identify the dimensions of human capital and their magnitude on the organizational performance.
3. To analyze the mediating impact of innovation on human capital and HRM practices to organizational performance.

LITERATURE REVIEW

HRM practices and organizational performance

In the competitive and knowledge based economy, HR practices are supposed to be the most important resource. Now-a-days, it has become more crucial for organizational success (Moyeen & Huq, 2001; Werther & Davis, 1996). In today's competitive world, success of the organizations depends on the techniques management are utilizing the capabilities, competencies and skills of their human resources (Absar & Mahmood, 2011).

The impact of HRM practices on firm level has become important element. Many studies have analyzed and expressed a significant association between firm's performance and HRM practices like factors included in the HRM practices and performance of firms as turnover of employees, productivity, quality in sales, earning profits, market value and return on investment. (Lau & May, 1998; Harel & Tzafir, 1999; Youndtet al., 1996; Khatri, 2000). Beer et al. (1984) suggested that there are some variables like employees' commitment, competence, cost effectiveness and congruence and cost effectiveness which performed their roles as intermediary variables. The new development of high innovation, communication, technology and information have proposed many construction organizations to effectively look for new thoughts, ideas for products or services, doing experiments for innovation, and bringing creative solutions for the purpose of bringing the betterment in the performance or quality of products, services, systems, and technology which are known as organizational innovation.

Human capital attributes and organizational performance

Researchers from different contexts found the significance of human capital for desired performance and outcomes like development, job creation, innovation, and economic development (Frese, 2000; Autio, 2005). Human capital attributes, such as skills of workers, training, trust, knowledge, education and have long been taken as critical success factors in organizational performance (Florin et al., 2003). A particular area for analysis, getting

growing attention now-a-days by many practitioners and analysts, is the importance of human capital and its impact on organizational performance (Moyeen & Huq, 2001). Ishikawa and Ryan (2002) suggested that it is the human capital that can enhance the firm performance. Moreover, academics and researchers observed that attributes of human capital play larger role in the firm performance by implementing some specific activities which are required for the knowledge creation in the working environment (Honig, 2001; Bosma et al., 2004).

Human capital, innovation and performance

Today, competitive environment is getting dynamic, stiff and tougher by local and global competition, limited organizational resources and due to the technological change. So it is necessary for the organizations to adopt innovative ideas to be in competitive advantage (Holmqvist, 2004). Previous literatures include a limited number of studies examined the relationship between the human capital and performance but not explains the value of innovation (Camisón & Villar-López, 2014).

Innovation is considered as a major factor for economic growth in developing countries (Lee & Kang, 2007; Robson et al., 2009; Crespi & Zuniga, 2011). It becomes critical to understand role of innovation at the firm level. Many studies highlighted the importance of human capital among other factors as a driving force for innovation in context of performance (Dakhli & De Clercq, 2004). The author of this study wants to put some efforts on determining the need of human capital for introducing innovations in the organizations because it has been observed that it helped in creating new knowledge. (Smith et al., 2005).

Hence, human capital when adopting the innovative ideas, products and processes is now becoming the main factor for organizational performance and productivity.

Hypotheses

H1: HRM practices are positively related to the organizational performance.

H2: Human capital is positively associated with organizational performance.

H3: Innovation mediates the relationship of HRM practices and organizational performance.

H4: Innovation mediates the relationship of Human capital and organizational performance.

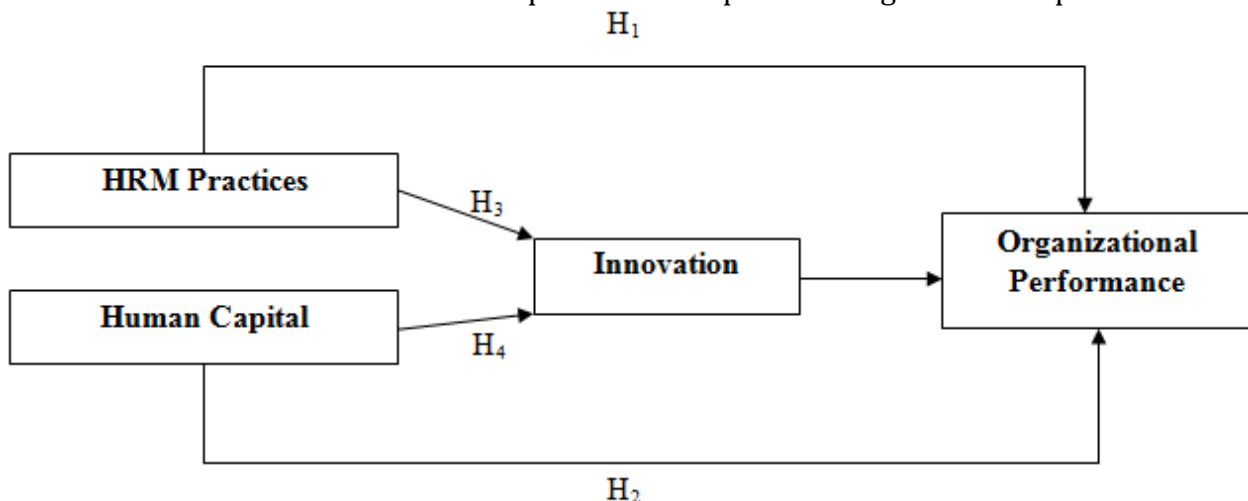


Figure 1: Research Model

METHODOLOGY

The study was conducted to explore the relationship among HRM practices, human capital, innovation and organizational performance. A pre-structured questionnaire was used to collect

data to analyze the association among these variables. The data collected for this research was based on individual level. Concerning the survey, a questionnaire was developed with the aim of measuring HRM practices, Human capital, innovation and organizational performance. It is observed that for the data collection, survey is considered an easier approach (Yu & Egri, 2005). The number of questionnaires distributed among the employees of construction industry were 470 of Pakistan using a simple random sampling technique. Out of 470 employees, 315 completed questionnaires were returned. For the analysis of data Software like SPSS using AMOS was used.

POPULATION

The population for present study is the employees of construction industry of Pakistan. The sample technique for this study is simple random sampling technique.

Scale

For human capital, the questionnaire items have three dimensions: training, trust and education. These items of the human capital were taken from previous literature on human capital (Delaney & Huselid, 1996). HRM practices consisted of 8 Items adopted from Huselid (1995), the endogenous construct or dependent variable "organizational performance" consisted of 5 items. These items of dependent variable were adopted from Schuler and Jackson (2005). The questionnaire items of "innovation" consisted of 10 items derived from Lin (2001). 5 point likert scale has been used for this study to obtain the responses from participants in all scales. 1 (Strongly Disagree) to 5 (Strongly Agree).

Descriptive Statistics

Table 1 shows the gender, age, education distribution of the current study. The total of 315 questionnaires was received out of which 200 were males and 115 were females. The percentage of males of total respondents was 63.5 percent while the female percentage was only 36.5 percent. According to the age distribution, the respondents ranging from 20 to 30 were 75 (23.8%), from 31 to 40 respondents were 135 (42.9%), from 41 to 50 they were 70 (22.2%) and from 51 to 60 the total respondents were 35 (11.1%).

The respondents having education of bachelor were 25 and its percentage was 7.9%. The master degree holder respondents were 50.8% which is the greater number of this study. The respondents participated in the answering questionnaires having MS/M Phil degrees were 38.1%. In the last the respondents who had PhD degrees were 10 and its percentage was 3.2 of total respondents.

Table 1: Demographic Information (N=315)

<i>Variables</i>	<i>Frequency</i>	<i>Percentage %</i>
<i>Gender</i>		
Male	200	63.5
Female	115	36.5
<i>Education Level</i>		
Bachelors	25	7.9
Masters	160	50.8
MS/MPHIL	120	38.1
PhD	10	3.2
<i>Age Group</i>		
21-30	75	23.8

31-40	135	42.9
41-50	70	22.2
51-60	35	11.1

Reliability

For testing the reliability of questionnaire for this study Cronbach’s alpha test was utilized. The value of cronbach’s alpha is greater than .07 which is considered as the acceptable value for internal consistency.

Table 2: Cronbach's Alpha

<i>Variables</i>	<i>Items</i>	<i>Cronbach's α</i>
HRM Practices	8	0.843
Human Capital	5	0.720
Innovation	10	0.732
Organizational Performance	5	0.854

The cronbach’s alpha of human capital, HRM practices, innovation and organizational performance is 0.720, 0.843, 0.732 and 0.854 respectively, showed good scale reliability.

Correlations

The means and standard deviations and correlations of independent, dependent and mediating variables are presented in Table 3. Human capital has significant positive correlation with organizational performance ($r = 0.693$, $p < 0.01$), HRM practices ($r = 0.784$, $p < 0.01$). Innovation also has significant positive relationship with organizational performance ($r = 0.743$, $p < 0.01$) which also justifies claim of the study and provides confidence for testing Hypothesis. It is worth mentioning that the HRM practices and innovation are highly correlated with organizational performance, whereas Human capital was although positively correlated but having weak relationship than HRM practices and innovation.

Table 3: Correlations

Variables	Mean	STD	ORG	HRM	HC	INN
Org Performance	3.68	0.94	1.000			
HRM Practices	3.59	0.65	.784**	1.000		
Human Capital	3.93	0.67	.693*	.775**	1.000	
Innovation	3.47	0.73	.743**	.676**	.710**	1.000

ORG=organizational performance, HRM= HRM practices, HC=human capital, INN= innovation
****.** Correlation is significant at the 0.01 level (2-tailed).

Confirmatory Factor Analysis (CFA)

The main aim of current study is to investigate the findings of previous researchers and support our hypothesis. In order to analyze the given hypothesis, CFA and then hypothesis testing has been conducted (Hair et al., 2014). The initial value of these 28 items through CFA indicated a poor fit model because these values of factor loading were beyond the recommended levels.

Table 4: Model Fitness Ratio of CFA

<i>CMIN</i>	<i>CMIN/DF</i>	<i>GFI</i>	<i>NFI</i>	<i>CFI</i>	<i>RMSEA</i>
Model A	1.782	.732	.764	.768	.068

In the analysis, the modification indices showed ways to improve the fit. After deleting the items and modification indices the CFA expressed that a model is good fit. The values of CMIN/DF, NFI, IFI, TLI, CFI and RMSEA also improved that showed is table 5.

Table 5: Overall Measurement Model

<i>Fit Indices</i>	<i>Initial</i>	<i>Final</i>
CMIN/DF	1.782	2.032
CMIN	789.04	149.582
IFI	.779	.928
GFI	.732	.918
CFI	.768	.932
NFI	.764	.932
RMSEA	.068	.048

The χ^2 value is 2.032 which are considered as the reasonable value for model fit and below the cutoff value of 5.0. RMSEA's value in the above table shows that it is 0.048 which is below from 0.05. Furthermore, CFA also presented that the model is good fitted. Findings confirmed that the model is good with the standards of the statistically fitness of model.

Structural equation modeling

Figure 2 represents that hypothesis were tested through SEM. From the analysis of the data, it was found that HRM practices ($\beta = 0.618$, $p < 0.01$) was positively related to organizational performance. So results expressed that there is significant positive linkage among the performance of the organizations and practices of HRM. Thus, H1 was supported. Human capital ($\beta = 0.214$, $p < 0.01$) was also positively associated with organizational performance. So, the current study supports the hypothesis 2. Next, the author analyzed the role of innovation as a mediating effect with the rest of variables which are under study in this research. In this study bootstrapping technique was used for testing the mediating impact of innovation on the HRM practices, human capital and on the performance of organization and the results also indicated that innovation mediates the connection among the performance of the organization and practices of HRM. HRM practices effect organizational performance significantly both directly ($\beta = 0.61$, $p < 0.01$) and indirectly ($\beta = 0.49$, $p < 0.01$) and ($\beta = 0.38$, $p < 0.01$). It predicted the partial mediation of innovation with HRM practices and organizational performance. In the final hypothesis 4, we predicted that innovation (the mediating variable) partially mediated the association between human capital and organizational performance. Human capital effects organizational performance significantly both directly ($\beta = .21$, $p\text{-value} < 0.01$) and indirectly ($\beta = .13$, $p\text{-value} < 0.01$) and ($\beta = 0.38$, $p < 0.01$)., So it is proved that H3 is also accepted and partial mediation is found between these two variables. Hence, current study supports these hypothesis and partial mediation of innovation was found between the independent and dependent variables.

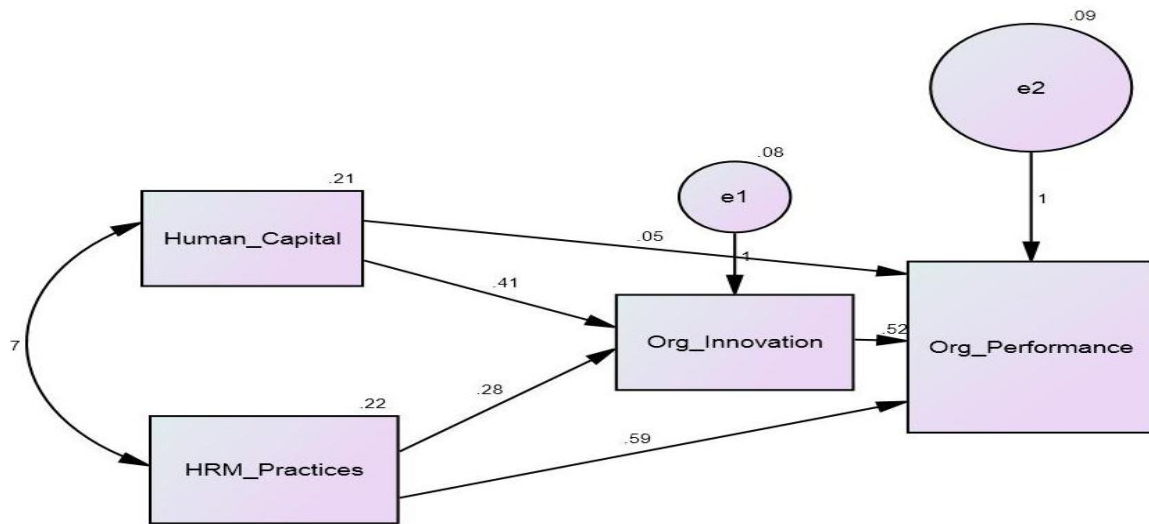


Table 6: Decision of Hypotheses

<i>Hypothesis</i>	<i>Independent Variable</i>	<i>Mediating Variable</i>	<i>Dependent Variable</i>	<i>Regression Coefficient</i>	<i>Decision</i>
H1	HRM Practices	-	Organizational Performance	0.618	Accepted
H2	Human Capital	-	Organizational Performance	0.214	Accepted
H3	HRM Practices	Innovation	Organizational Performance	0.618 0.497	Accepted
H4	Human Capital	Innovation	Organizational Performance	0.214 0.138	Accepted

DISCUSSION

In today’s dynamic environment, human capital and HRM practices both are very vital for the success of every organization. Human capital has the ability to bring innovation and renewal of strategies in the organization. The skills, knowledge and competencies possessed by the employees help the organizations in creating innovative goods and services due to which the complete productivity and performance of the organization is enhanced.

The findings of this research present that there is positive relationship between the human capital and Organizational performance. There has also been found positive and significant relationship between the HRM practices and performance.

These findings are in agreement with the other researcher results like (Youndtet al., 1996; Carmeli&Tishler, 2004; Hsu, 2008; Colombo &Grilli, 2009; Marimuthuet al., 2009; Choudhury, 2010). The results of this research is also consistent with a research in which the findings were found that having the capability of human capital the organization is able to create entrepreneurship behavior and improve the organizational performance (Barney, 2001).

The findings of this research also similar with the results of another research, in which the authors presented that with human capital the employees can obtain the skills of entrepreneur like expertise in managing resources strategically, develop creativity and agility (Alvarez & Barney, 2002). These results are also in consistent with another research in which the findings

are that there is positive relationship between human capital indicators and organizational performance (Seleim, Ashour&Bontis, 2007; Maditiniset al., 2011).

CONCLUSION

The main aim of this study was to investigate the relationship between the human capital, HRM practices and organizational performance and also to analyze the mediating role of innovation in their relationship in the construction industry in Pakistan. Both human capital and HRM practices are the success factors for bringing increment in the performance of the organization.

The findings of the research presented that human capital, HRM practices, innovation and organizational performances are positively connected with each other. The organizational performance can be enhanced with creating an environment in the organization in which human capital of employees is improved and HRM practices are well implemented in construction organizations in Pakistan. The proposed structural model expressed that there will be improvement in the performance of the overall organization by implementing good training programs, effective performance appraisal system and with effective and efficient compensation system and with human capital.

The questionnaires sent to the employees of the construction sector organizations were 470 out of which 300 questionnaires were returned. The medium of sending questionnaires were emails. The emails addresses were taken from the management after introducing the purpose of the study and the importance of the research for the construction organizations. The response rate of the study was 63 percent which is considered as reasonable.

The construction organizations need to be effective and efficient in implementation of developing human capital and applying best policies of HRM practices in order to gain maximum benefits and increase the performance of the organization.

RECOMMENDATIONS

The main contributions of this study to the construction organizations are that the management should critically think about HRM practices and they should develop their employees by transferring the skills of entrepreneurship, knowledge and competencies in order to make them creative and innovative. These creative and innovative ideas will improve the performance of the organizations and ultimately the organizations will gain higher success rates.

There were many difficulties and obstacles due to the previous work done on this topic and the hesitance of the employees in these construction organizations to fill the questionnaires. There was also lack of research culture in the academics.

1. The first limitation of the study was that the sample used in this research was too small, it is suggested that in the future there should be large sample size taken to conduct research on this topic.
2. Another limitation is that the number of females working in construction organizations is also so short due to which it becomes very hard to generalize the findings of this research.
3. The third limitation is that the factors taken in HRM practices are only three, therefore, the future research should be based on some new variables too in order to broader the concept.

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Matter's Influence Child's On the Speech Development in Kenya

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Abstract

Mothers have key roles in their children's speech development. Sibling a child true love is an essential step in speech development. Simply talking to a child and getting a conversation going by means of emotional expression, gestures and sounds equally important while doing this, it is necessarily to follow the child's lead signs, expressions, gestures, emotions, praising and appreciating what the child's manages to do and helping him or her to focus on his or her attention, thus sharing the child's experiences. Mothers therefore, play a big role in helping their children to learn rules, limits values and more importantly develop their speech in a natural manner.

Key words: speech, child, mother, vocalization, language development, expression

SPEECH DEVELOPMENT

Language and communication skills are critical to a child's development. Good communication makes them better able to engage in socialization and to learn from their environment and from formal classroom instruction. When we talk about communication we are talking about both speeches which are the verbal means of communication and language which is using shared rules to put words together to express thoughts and feelings as well as to understand the meaning of language through both spoken and written communication. Since parents are child's first teacher, knowledge of language development in children improves their ability to interact with their child to stimulate and guide them in their ability to understand and communicate with their environment.

From birth on, children are programmed to develop speech and language. The first five years are most critical but language development continues throughout early childhood and on into adolescence. During the first five years stimulation of language development is important as the brain is both developing new nerve cells as well as multiple connections between nerve cells to serve the function of language both expressive and receptive. Lack of stimulation during this time could result in a child making slower progress or end up with poor communication skills. Later, we provide some tips for parents on how to help with language development but the basic suggestions are to spend lots of time talking, singing and reading to your child.

In early stages of language development, the brain is programmed to attend to speech sounds and begin to mimic them. Early on babies like to make sounds up on their own. Later they attempt to repeat sounds/words that they are exposed to from their environments.

Children usually say their first words between nine and 18 months old. The first common words are either "mama" or "dada". What's kind of interesting is no matter what language children are raised in, the first words usually reference either mother or farther. By the age of 18 months a child usually has a vocabulary of 50 to 150 words.

By two they can probably use over 300 words and understand about 1,000 words. By about 18 months children begin to put a couple words together to form a sentence sometimes referred to as "telegraphic speech" such as "mommy ball" or "mommy throw ball".

Around three years of age, children begin to use language for all kinds of things. They are not only trying to get things by asking they are talking about past experience and even beginning to use it to pretend. By preschool (4½) they are beginning to understand and use the rules of language to express possession of something, connect thoughts and qualify. Their language is becoming more like that of adults.

In elementary school children continue to expand their use of oral language but are also learning to read and write. As children progress through middle school and high school they continue to expand their vocabulary and refining their grammatical skills and write in more complexities as well as continue to develop reading comprehension skills.

The table below describes specific skill development for each stage of development through age 8. Below the development time line you will find information on how you can stimulate and encourage language development as well as information on how to recognize lagging development and what to do about it.

ATTACHMENT AND ATTUNEMENT.

A child's journey of language before birth, as babies in the womb hear clearly enough the last few months of pregnancy to distinguish their mother's voice. From the six months of gestation babies become sensitive to the particular qualities of their mother's voice and the rhythm of native language. A study from Germany recorded and analyzed the cries of 60 healthy babies at three to five days of age, recruited half and half from French-speaking and Germany-speaking families. Analysis reveals clear differences in the shape and tone of the babies' cry melodies. As the baby and the mother mutually seek communication, through the process describe the Trevarthan as 'intersubjectivity', the beginnings of the attachment behavior are laid down. Bowlby's influential that attachment is a biological instinct involving the development of a strong nurturing bond between mother and baby formed during early infancy. He contended that the way in which interaction takes place shapes the nature of the attachment and that the internalization of these early interactions provides a prototype for later relationships. Others have considered the possibility of other attachments figures in a child's life and emphasized the dynamic nature of attachment security.

A review of the clinical applications of attachment theory describes the major bio behavioral shifts that normally occur during the first two years. In the first two months the baby has limited ability to discriminate between caregivers though re-colonizes the mother's smell and sound. A shift between two and three months occurs with the emergence of increased social interaction including more eye contact, social smiling and responsive cooing. Gradually, during the period 2-7 months, the baby becomes more able to discriminate between caregivers and, while intensely motivated to engage with them, generally doesn't have strong preferences between known caregivers and unknown others. A further shift occurs around 7-9 months with the emergence of separation. Between exploring and seeking comfort and security. A further shift occurs as 18-20 months with the emergence of pretend play language as symbolic representation. From then until the age of three, children increasingly have preferences and their own goals that can conflict with those of others requiring compromise and negotiation. The reciprocal process of turn taking is necessary condition of communication development and, in particular language. Stern describes parent-child communication as a synchronous 'dance' comprising periods of attunement (e.g. Eye contact, smiles) followed by periods of

disruption (e.g. turning away, withdrawal). The 'coming back together' following periods which are not focused or attuned, is significant for the development of secure attachment relationship (Karmiloff, 2001)

Murray and Cooper's research review suggests that when a mother's capacity of attune reduced and periods of disruption increase, for example, and can occur during postnatal depression, this is linked with a range of adverse social and emotional outcomes.

CONTINGENCY AND COMMUNICATION

Young children naturally reach out for interaction through babbling, facial expressions, and gestures. Adults respond with the same kind of vocalizing and gesture back, frequently repeating and extending the baby's communication through commenting on the babies' actions and vocalizations. This back-and-forth process, or 'serve and return' interaction, between children significant adults in their lives serves to shape the architecture of the development brain of a baby. It is known as contingency. Contingency is the extend to which the intended recipient is fully sensitive and responsive towards receiving a form of communication from another person. In a baby-mother communication this means the extend to which they are engaged in reciprocal activity. Research indicates the importance of contingency NCT research overview. Parent-child communication is important from birth research.

Dry Cathy Hammer, policy and community's manage, National Literacy Trust. Research 15 NTC's research overview series provides an evidence base to guide the practice of NTC and other transition to parenthood workers on topics of relevance during pregnancy, birth, parenthood and the care of babies and toddlers aged 0-2 years. Workers must decide how to apply the evidence in their practice but they can feel confident that the research overview provides an up-to date, balanced and reliable summary and interpretation of the relevant research literature.

EVIDENCE FROM DETAILED OBSERVATIONAL STUDIES.

Observational and experimental research with mothers and babies has shown the importance of mutual engagement and responsiveness. For example, in an American study of 62 mother-child dyads in which the families were white, the mother had completed high school and children were developing normally, Donovan et al observed and analyzed their behavior and interaction at intervals, from six to 24 months. A number of tests and observations were carried out: the mother's 'sensory sensitivity' (responsiveness to signals of emotion) was assessed. The mother's and the child's behavior and their emotional responses to each other were observed during free-play sessions and, at 12 months, the child's attachment status were assessed using standardized strange situation procedure. This procedure involves observing the child's behavior in a controlled setting while a/ sequence of planned and timed events occur involving the mother leaving her baby in a room with an unknown person, and then returning after the separation. The findings showed that early maternal behavior was predictive of later maternal behavior. Sensory sensitivity to positive baby expressions at six months predicted the mother's behavior at 24 months, and sensory sensitivity to both positive and negative expressions were associated with the later emotional responses of the mother to her baby. The nature of the baby's attachment predicted his or her temperament and behavior as a toddler, and interaction with the mother at 24 months (Ainsworth, 1976). This study both informs our understanding of early maternal responsiveness and demonstrates the importance of the quality of the mother-baby relationship in shaping later toddler behavior. Other studies have shown how high levels of contingent response by adults to a child (consistent positive responses to the child's action), helps babies gain an understanding of the rules of conversation and a sense of self during the first year of life. Games such as 'peek-a-boo'

promote the learning of 'my turn, your turn,' 12 by the age of 12 months babies are typically able to engage with adults in terms of showing them objectives (Trevathan, 1980)

Investment in engagement has been found to have a positive outcomes for children's language. Join-attention between child and parent at 14-15 months was found to Carpenter et all's study of 24 mother-child dyads, from middle class American families, to result in quicker language acquisition. Also, time spent in a mother-child joint attention when the child was under 18 months was found to predict subsequent vocabulary growth. Parents who frequently produce contingent replies to their baby's early verbalizations have children whose language structure develops more quickly. Thus it is evident that by responding to their baby's lead, and doing so in a positive and generally consistent way, mother promote their child's language skills, (Zeanah, 2011)

THE DEVELOPMENT OF COMMUNICATION AND LANGUAGE

A child's language development is very much an active and interactive process, rather than a passive one, this has been demonstrated by the theories and research evidence discussed already relating to attachment and attunement, communication and contingency. Go Nick colleagues suggest that the brain can be thought of as a 'social brain', one which is developed through social interaction, particularly the relationship between mother and child in "how babies think", they present a synopsis of findings indicating that from birth babies can discriminate human faces and voices from other sensory stimuli and prefer them to other stimuli. Within a few days of birth babies are discriminating familiar people, such as their mother, from others. These kinds of abilities, and having opportunities to develop them, are considered as important part of babies' neurological development, referred to sometimes as 'building babies' brains Recognizing.

PROBLEMS OF CHILDREN'S SPEECH DEVELOPMENT

The following could help the mother in diagnosing children's speech developmental challenges

- Lack for poor eye contact and lack of attention and focus.
- Listen to how they pronounce words. Are they hard to understand?
- Can they understand simple directions?
- Are they having trouble with basic social skills? Does your child not seem to be interested in having you read to them?
- Do they repeat what you say or say the same thing over and over.
- Do they lack empathy for the feelings of others?
- Do they avoid conversations?
- Are they only interested in talking or reading about one subject?
- Is your preschooler not engaging in fantasy play? Do they lack sense of humor?

Gerhardt makes a strong case for the influence of social and emotional interaction. She contends that 'being lovingly held is the greatest spur development, more so even than breast-feeding'. As the baby develops, parents adapts their rhythm, tempos and intensity to the baby's level, with the parent's activity gives meaning and significance to the baby's activity through a reciprocal process of comment, evaluation and reflection back. Thus, the child develops its sense of self. Children begin to acquire language as they construct representations of the sounds they hear. These representations gradually acquire the characteristics of their native language. By three months cooling usually starts and a baby who vocalizes, and then gets a response, will increase the vocalization showing attunement and response to the mother's voice. A few months later, babbling (repeating the sound over and over) begins to emerge in babies' behavior, particularly when they are alone (Murray, 1997)

Children generally use gesture to communicate before they use words, typically starting to produce the first gestures, such as, reaching, clapping and waving 'bye' between nine and 12 months of age. The gestures they produce are predictive of the early stages of spoken language development. The more the child gestures, the earlier they are likely to use language. By 12 months babies are typically able to babble strings of sounds and first words, such as 'ma-ma', 'da-da', emerge. Actions, such as gazing and pointing, are starting to become attached and referenced to the actions of those around them and children typically move on to point to objects, to engage with adults, following their lead and initiating shared attention. As children start to link two words together, gesture continues to precede and to predict positive language outcomes. Interestingly, early gesture has been found to selectively predict later language learning. Rowe and Golden-Meadow's longitudinal observational study of 52 children interacting with their caregivers at home found that the number of different meanings conveyed in gesture at 18 months (such as point at dog, flapping arms to represent flying, shaking the head for 'no') was a strong, positive predictor of scores on the Peabody Picture Vocabulary Test at 42 months. In addition, the number of gesture plus speech combinations, particularly those conveying sentences like ideas, produced at 18 months predicted sentence complexity at 42 months (Bowlby, 1988)

As language develops young children map words on to existing concepts. This enables them to organize language and knowledge about familiar objects and events. Through lexically rich and naturally occurring conversations, children's language skills develop. Increasingly, the body of evidence shows that language is most effectively learned when mothers tune into their babies in a responsive and sensitive manner. In all languages, mothers utilize a style of speech with babies known as infant-directed speech, or mothers ('baby talk') characterized by a higher pitched intonation, shortened or simplified vocabulary, shortened sentences and exaggerated vocalizations or expressions. As babies' communicative abilities develop, the complexity and amount of their mothers' speech increases, so extending the child's communication (Thompson, 2000)

During the early months of language development, before 19 months of age, more rapid language development has been observed in children where the mother follows, rather than attempts to redirect the focus of the child's attention. Building on studies carried out in the 1980s and 1990s, more recent longitudinal studies have provided further evidence of this. Markus, for example, followed 21 babies and their parents and found that language at age 18 months, and improved scores in standardized language assessments at 21 and 24 months, was related to observed earlier differences in the frequency, responsiveness and duration of infant-mothers joint attention episodes.

THE EMERGING PICTURE

It is becoming increasingly clear that the more babies experience shared talk and activity, the more effective they become as communicators. This has been understood by practitioners who work with parents and young children for sometime and now research is able to demonstrate this, allowing the process to be understood and the impact of different kinds of interaction to be quantified. A large scale American study of 275 families of children aged 2-48 months recorded continuous periods of language which were then coded for analysis. The analyses presented make a strong case for the importance of mother-child conversational turns that children had with adult mothers was robustly and positively associated with scores on the preschool language scale indicating healthy language development. (Stern, 1985). Mothers with children of all ages can enhance their children's language by talking about interesting events daily and encouraging children to do the same. An elaborative style (including varying intonation, information about causes and effects, people's

motivations descriptions of objects and actions) is important for language development and for enhancing children's understanding of emotion and mind. Both the amount and type of talk are important. In particular, reminiscing about events is a particularly effective way of helping young children understand, and use, words. This involves a context that is personally meaningful, elaboration by the mother, the use of questions and explanations. Four particular aspects of an effective reminiscing style that can be employed by the mother include;

- Who –questions (who, what, where,)
- Associations (linking the event to the child's prior knowledge)
- Follow-ins (encouraging aspects of the conversation that the child is interested in)
- Evaluation (praise)

Aboutalebi et al (2014) carried out a study in Iran to evaluate the effect of a formal intervention to encourage conscious use of this approach. The intervention, designed for mothers of pre-school children, involved 40 mothers and their children aged 44-64 months. The procedure involved four stages: children's language pretests using the Wechsler preschool and primary scale of intelligence –revised, maternal training using a video describing the elaborative conversational style and event memory pretests for children, mother-child play involving a camping activity and subsequent event memory assessments following delay intervals of one day and three weeks. Compared with a control group of untrained mothers, the trained mothers used more who-questions and positive evaluations but there were no differences in follow-ins.

Mothers can further contribute to their children's speech development in the following additional ways:

Early years

- Verbally responding to the baby's vocalizations
- Talking to the baby around six months used shared attention and sign language (gesture). Point and name things that they see. Uses exaggerated voice when you describe things. Use feeling words.
- Singing to the child from childhood until yet they ask you to stop.
- Have older children make up songs.
- Use songs to communicate things like time to go to bed, time to clean up etc.
- Making of songs that are silly or that communicate affirmations related to their positive qualities.

Older toddler and preschooler

- Initiating conversations with the child related to recent events, what they are doing.
- Making up stories along with the child. Each contributes. This not only stimulates language but thinking, creating and a sense of humor.
- Gradually increasing the complexity of grammar and vocabulary used to communicate.
- Providing children with expanded information about events, things they see and how they feel.
- Reading interactively to engage their participation. Asking question, using dramatic inflections, letting them guess what will happen next, pointing to pictures and describing them, asking children due to do the same.

School Age and Beyond

- Keeping the conversation going.
- Having family meetings.
- Having dinner together at the table and encouraging conversations. You can use “thorns & roses” by each family member sharing one thing that went wrong and one thing that went well during the day.
- After seeing a movie or TV show talk about what happened?
- Encourage reading. When they finish a book get their thoughts and feelings.

Chatting with children.

Chatting with children is a great way to give them lots of examples of how we use words to share ideas and get information. The words mothers and other adults speak to children make up the language “input” that children need to learn new words and ideas. The more input mothers give children, the more opportunities children have to learn how to express themselves and understand what others are saying.

Research shows that more the words the mother speaks to children, the larger children’s vocabulary. When mothers promote back-and-forth conversations with children, children show greater complexity in their speech. Mothers should talk through or comment on routines (e.g. when washing hands, “we are washing hands. We are making lots of bubbles”). They should comment on children’s actions or objects and events. (e.g. “Billy is drawing with a red crayon”). They should also respond to infants’ nonverbal communication with words (e.g. “I see you reaching for the blocks. Would you like to play with the blocks?”). Additionally, mothers should ask questions and pause for answers, provide the answers for preverbal children and expand on children’s words (e.g. “I heard you say, ‘cheese’. Would you like to eat more cheese?”) (Mampe, 2009)

Commenting on actions and events

Commenting on actions or events for children is a great way to give children examples of how to use speech in everyday routines and activities. Commenting involves the mother talking about what she is doing, seeing, or thinking about in the presence of the child. The mother may also describe what children are doing or seeing. This kind of talk provides children with examples of the kind of language that they used in everyday activities. Commenting on actions or events may also help the children learn and understand which words go with which actions.

Researchers’ shows that the more the mothers speak to children, the better language skills children develop. Mothers should therefore give detailed descriptions of what you or the child is seeing or doing, comment on daily routines like hand washing, eating, or diaper changing and model language for children by commenting on objects or events.

Varying the use of speech.

Talking to children is one of the most important ways of adults can help them learn to communicate and develop strong language skills, by talking with them, adults provide children with language “input” that children can then use as models for how to talk. The more types of language input that children receive, the more their language skills can develop and grow over time. When adults “mix it up” by using lots of different types of words and grammar in their speech to children, children benefit by learning to use more complex and varied language.

Research shows that repeated and varied exposure to unfamiliar words, along with meaningful contexts. (E.g. pictures, verbal explanations) helps children learn new words. During playtime or mealtimes, the mother may introduce new vocabulary by using rare or uncommon words

(e.g. "I have a big appetite. I am eating a lot of food today!"). She can also give verbal explanations for the unfamiliar words.

Labeling

Labeling an object or activity is one way of helping children learn the names of objects and actions in their world. When children hear adults use label for objects or actions, they have an opportunity to learn about how words are used and may be more likely to use the same words when trying to communicate with others. Mothers can help children learn the names of objects or activities by focusing on one object or activity at a time. Research shows when a mother labels or comments on an object upon which a child is focused, or focused together on one object, and the mother says the name of the object, children are more likely to learn the word for that object (Stern, 1985)

Tuning In

Children are always curious about the world around them. Mothers can make the most of this natural curiosity by engaging children in conversations about the objects or activities that have captured their attention. By tuning in and talking to children about whatever is holding their attention, mothers have an opportunity to support children's speech and language development by responding to their interests.

Research shows that children whose mothers talk about what the child is focused on have more advanced vocabularies than children whose mothers try to redirect their attention. Notice on what the child is focused and ask open-ended questions like "what...?", "why....?" And "How...?" then pause for a response. Provide the answers for preverbal children. Provide information about the object or activity the child is focused on by commenting or describing the object or activity.

Reading with the child

Sharing picture storybooks with children is one way to help them learn new words. Some of these books will become favorites that children will ask for again and again. Re-reading the same book multiple times helps children to learn new words.

When a mother reads a story to a child for the first time, children are faced with many tasks that may make paying attention to new words difficult. They need to focus on the plot, setting, characters and so forth. The second time a child hears a story they are more familiar with at and can begin to predict what was going to happen. After hearing a story many times, children can pay less attention to the other parts of the story and can focus their attention on the other details, like learning new words.

Research shows that the more often adults read to children, the better children's language skills. One encounter with a new word is not enough to support learning; children often need to hear words many times before learning them.

Recognizing problems in children's speech development.

The following could help the mother in diagnosing children's speech developmental challenges:

- Look for poor eye contact and lack of attention and focus
- Listen to how they pronounce. Are they hard to understand?
- Can they understand simple directions?
- Are they having trouble with basic social skills?
- Does your child not seem to be interested in having you read to them?

- Do they repeat what you say or say the same thing over and over?
- Do they lack empathy for the feelings of others?
- Do they avoid conversations?
- Are they only interested in talking or reading about one subject?
- Is your preschooler not engaging in fantasy play? Do they lack a sense of humor?

CONCLUSION

Evidence is now established and growing every year to show that mothers who are attuned to their baby promote their attachment and communications skills. The home learning environment, and in particular the communication environment, for babies and toddlers during the first 24 months influences their language acquisition and their performances at school entry. This in turn is later associated with their educational attainment. The communication environment is influenced with by the social-economic context of the family, with children in more disadvantaged families having fewer opportunities for language development. Research shows that what parents do with their children before they are three years old plays an important part in their development, having more of an effect, even than social background, on child's readiness for school. It is important that practitioners and parents are aware of the impact of parent-child communication and in particular the influence of the home learning and communication environment in the early years.

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The Undergraduate College Education in USA: Schools with Best and Worst ROI

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Abstract

This study examined the ROI, total 4-year education cost, graduation rate and average loan amount for undergraduate education across schools in USA. The results indicate that students from Southwest region of USA enjoyed highest mean ROI (6.69%) along with highest median ROI (6.50%) with minimum standard deviation of 2.03% among all five regional analyzed over 20-year period. Yale University reports the highest graduation rate of 98 percent in the nation. Georgia Institute of Technology (In-state) enjoyed highest ROI of 12.30 percent over 20-years period of study.

Keywords: College ROI Cost Graduation Undergraduate

BREIF LITERATURE REVIEW

The cost of an undergraduate college education has been rising each year. The basic economic question is the time required to pay back educational debt after entering the workforce in USA. Allie Bidwell (February 2015) writes "It's a strange paradox. At a time when Americans overwhelmingly say it's important to receive a college education, their faith in the economic value of the investment is slipping, new research shows. A survey of more than 2,000 adults – 900 of whom were college graduates – released Tuesday by education technology company Greenwood Hall, shows more than half of graduates say those leaving college with a degree now will see a lower return on their education investment than those 10 to 15 years ago. Simply put, while the cost of college continues to rise and the economy is slowly coming out of the Great Recession, today's graduates might not get as much bang for their buck."

Students may have piled a huge education debt loan upon graduation. 70% of graduating seniors will enter the workforce with an average student loan debt of \$29,400 (Carrie Sealy-Morris 2016). Hence, the question of ROI on college education is very important for graduates. ROI for a college degree is different than ROI of an investment/project due to opportunity costs; like students' time, working possibilities, and lost entertainments. In addition, students also have to study continuously and go through stress and pressure of regular assignments and exams. Thus, ROI on college education may be different than business's ROI.

Carrie Sealy-Morris (2016) writes "There are a lot of factors to take into consideration. You invest a lot more than just money into a college education – you invest time, work, and stress. That makes college fundamentally different from many other investments. ROI could be as simple as what income people make vs. what they paid for college and what they owe in student debt, but that is still too simple. Income isn't necessarily a measure of success, and student loan debt could just mean you took out more loans than you needed, not that the school was too expensive. While some short sighted people just want to know how much

money they can make straight out of school, others want a certain level of long-term career satisfaction. Neither is wrong.”

Studies like PayScale’s help would-be students (and their parents) make more informed choices. As Americans start to realize how much a bad choice can hurt them, they will demand more transparency. Some colleges are providing it, prodded by the federal government. For example, the University of Texas recently launched a website showing how much its graduates earn and owe after five years. (The Economist: Higher Education-6).

In the past, college education used to lead to better, brighter, and financially lucrative professional careers. However, in the present times, undergraduate education may not act as a ticket to better careers but may also result in significant educational loans upon graduation. According to the Federal Reserve Bank of New York, 44 percent of recent college graduates are underemployed -- working in jobs that don't require their degree -- as of 2012 (PayScale College ROI Report: Best Value Colleges: www.payscale.com/college-roi)

In spite of numerous articles printed in magazines, academic journals lack the analytical research on this topic. Therefore, this study is an initial step to analyze ROI and other factors relevant to students’ educational goals from an academic point.

DATA AND METHODOLOGY

The data is collected from information collected by Payscale.com's list of ROI rankings. Payscale.com website provides useful information on ROI and other factors important to college graduates. PayScale.com administers the largest real-time salary survey in the world with more than 150,000 new survey records added every month. The database of more than 54 million total salary profiles is updated nightly to reflect the most detailed, up-to-date compensation information available. Payscale.com data collection is strongly correlated with the size of the pool being considered, representing the diversity of the general workforce.

Both in-State and out-of-State educational institutions are included in this study. The following four variables (factors) are analyzed in this study:

1. Total 4-Year Cost (Principal Amount Invested): Full cost including tuition & fees, room & board and books & for a 2014 graduate. Actual net cost may vary based on a student's academic success and family income. Source: IPEDS. This variable is analyzed separately and is also used in computing ROI.
2. 20 Years ROI (Gain in Dollars over 20 Years Period after graduation): Difference between 20 years Median Pay for a bachelor’s grad and 24year Median pay for a high school grade minus total 4-year cost. This variable is not analyzed separately but is used in computing ROI.
3. Graduation Rate: Percent of full-time, first-time degree seeking undergraduate students who began their studies at the given school and graduate within 6 years. Source: IPEDS
4. Average Loan Amount: Received by full-time, first time degree seeking undergraduate students for the 2012-2013 school year, multiplied to represent amount over 4 years. Includes all Title IV loans and all institutionally and privately-sponsored student loans. Source: IPEDS
5. Annualized Return on Investment (ROI) Formula

Annual Percentage Yield (APY) = $(\text{principal} + \text{gain} / \text{principal}) (1/\text{years}) - 1$

For example:

Look at Indiana University Bloomington (in-State education)

20-Year Net ROI = \$303,000 (Gain over 20-years period)

Total 4-Year Cost = \$90,000 (Principal)

APY = $(\$393,000/90,000) (1/20) - 1 = 4.36660.05 - 1 = 1.076483 - 1 = 7.65\%$

Thus, ROI for Indian University Bloomington (in-State) graduate is 7.65% over a period of 20-years after graduation and entering the workforce.

The data is collected for 1,278 educational institutions across USA. However, incomplete data for 64 schools was dropped thereby reducing dataset to 1,214 schools. The data is also further divided in the five categories as follows:

- a. Midwest Region
- b. Southeast Region
- c. Northeast Region
- d. Southwest Region
- e. West Region

RESULTS

All schools in USA

The results of the analysis across all schools in USA are shown in Table 1 which shows that the mean annual ROI for undergraduate education in USA is 5.39 percent over the last twenty-year period with a standard deviation of 2.64 percent. The median annual income over the same period is found to be 5.50 percent.

The graduates from Georgia Institute of Technology (In-State) earned the highest annual ROI of 12.30 percent per year for 20 years, while Jackson State University, Mississippi (Out-of-State) graduates earned an average ROI of -10.30%. Comparison of total 4-year cost of education reveals that students at University of Chicago (Private) spent a total of \$245,000 while the total of cost education (\$46,500) at Elizabeth City State University of North Carolina was the cheapest among all schools in USA.

Yale produced highest graduation rate of 98 percent for the undergraduate students, while students at Baker College Flint MI were graduating at the lowest rate of 11 percent during the study period. The students at Clemson University (Out-of-State) took the highest loan of \$51,600 during their undergraduate educational life. On the other side, students at Colgate University (Private) were able to graduate with a minimum average loan of \$9,600 only.

Schools in Midwest Region

Table 2 (Panel A) shows the results for schools in Midwest Region. Data for 319 schools is used and incomplete data of 13 schools is excluded in this group.

The findings of this study indicate that the mean annual ROI for undergraduate education in Midwest region is 5.19 percent over the last twenty-year period with a standard deviation of 2.51 percent. Both these percentages are below the national average indicating that mean ROI is lower than national average with a tighter probability distribution. The median annual income is 5.35 percent which is slightly smaller than the national average.

The graduates from South Dakota School of Mines and Technology (In-State) earned the highest annual ROI of 11.94 percent per year for 20 years, while Ashland University (Private) of Ohio's graduates earned an average ROI of -3.30%. In this group of schools, students at

University of Chicago (Private) had to spend 4-year education cost of \$245,000 (which is also the highest in USA), whereas students at Missouri Southern State University faced the cheapest 4-year educational expense of \$58,900.

The highest graduation rate of 95 percent was reported by University of Notre Dame (Private), while students at Baker College Flint MI were graduating at the lowest rate of 11 percent during the study period (which is also lowest in USA). The students at Kettering University (Private) of Michigan had to take the highest educational loan of \$45,600. But, the students at Drury University (Private) of Missouri took the lowest loan of \$16,160 during their educational life.

Schools in Southeast Region

This study's results for schools in Southeast region are reported in Table 2 (Panel B). Data for 323 schools is used and incomplete data of 18 schools is excluded.

The results shown in this project suggest that the mean annual ROI for undergraduate education in Southeast region is 4.98 percent over the last twenty-year period with a standard deviation of 3.02 percent. While mean ROI is lower than national average, the standard deviation is higher national norms. Thus, according to findings of this study, mean ROI of this group is lower than national average with much wider distribution indicating relatively poor performance of the group. The median annual income is 5.19 percent which is smaller than national average.

The graduates from Georgia Institute of Technology (In-State) earned the highest annual ROI of 12.30 percent (which is also the highest in nation) per year for 20 years, while Jackson State University, Mississippi (Out-of-State) graduates earned an average ROI of -10.16% (which is also the lowest across USA).

In this group of schools, students at Georgetown University-Washington DC (Private) ended up paying \$236,700 (highest) for their 4-years education as compare to the lowest educational expenses of only \$46,500 at Elizabeth City State University (In-State) which is also the smallest educational cost in nation.

Students at Duke University enjoyed the highest graduation rate of 94 percent, while students at West Virginia State University (both In-State and Out-of-State) had to settle with the lowest graduation rate of 19 percent. Students at Clemson University (both In-State and Out-of-State) took highest loan of \$51,600 (which is also the highest for nation). In contrast, Southern University and A&M College (both In-State and Out-of-State) were able to graduate with the minimum educational loan of mere \$12,760.

Schools in Northeast Region

Table 2 (Panel C) shows the results of this project for schools in Northeast region. Data for 299 schools is analyzed in this group whereas incomplete data of 19 schools is excluded in this project.

Mean annual ROI for undergraduate education in this region is 5.20 percent over the last twenty-year period with a standard deviation of 2.19 percent. Similar to Midwest region, both these percentages are below national average indicating that mean ROI is lower than national average with a tighter probability distribution. The median annual income is 5.31percent lower than the national norms. Massachusetts Maritime Academy (In-State) graduates were

able to earn the highest annual ROI of 11.52 percent for 20-years period, while Centenary College (Private) of New Jersey graduates earned minimum ROI of -2.07%.

In this group of schools, students at Columbia University (Private) paid \$241,600 (highest) for their 4-years education as compare to the lowest educational expenses of \$77,300 00 at Rhode Island College (in-State). Yale University graduates enjoyed a graduation rate of 98 percent (highest in the nation), while students of Long Island University Brooklyn (private) faced the lowest graduation rate of 30 percent only. University of New Haven (private) students took the highest loan of \$49,200, while Colgate University (private) graduates were able to graduate with minimum educational loan of mere \$9,760 (which is also lowest in USA).

Schools in Southwest Region

Table 2-Panel D shows that data for 323 schools is analyzed in this group while incomplete data of 18 schools is excluded

Mean annual ROI for undergraduate education in this region is 6.69 percent much higher than national average with a standard deviation of 2.03 percent much lower than national average. In fact, this group has the highest mean ROI and lowest standard. The median annual income is 6.50 percent which is also highest among all regions. Thus, the results reported in this analysis indicate that graduates of Southwest region enjoyed highest return with least risk among all five regions studied.

New Mexico Institute of Mining and Technology (In-State) graduates received highest ROI of 11.87 percent while the lowest ROI of only 0.25% belonged to the graduates of Oral Roberts University of Oklahoma. Southern Methodist University (Private) students faced highest educational cost of \$229,300 whereas students at Northeastern University (In-State) of Oklahoma were able to graduate with a minimum cost of \$53,300. Highest graduation rate of 91% is enjoyed by Rice University students while graduates at Texas Southern University had to settle with the lowest graduation rate of 16 percent.

Comparison of average loan for graduation shows a tie between Baylor University (private) and Texas Southern University (In-State) for loan of \$50,400. In contrast, students at University of Texas –Pan American (IN-State) graduated with a minimum loan of \$15,320.

Schools in West Region

This study's results for schools in West region are reported in Table 2 (Panel E). Data for 178 schools is used and incomplete data of 11 schools is excluded.

The results shown in Table suggest that mean annual ROI for undergraduate education in West region is 6.09 percent over the last twenty-year period with a standard deviation of 2.79 percent. While mean ROI is higher than national average, the standard deviation is also higher than national norms. Thus, according to findings of this study, mean ROI of this group is higher than national average with much wider distribution. Median ROI for the group is 6.08% which is also higher than national average. A closer look at table 2 also indicates that colleges in West region are second to colleges in Southwest as per ROI ranking.

Graduates of Brigham Young University earned highest ROI of 12.28 percent while Adams State College (Out-of-State) graduates earned minimum ROI of -6.96 percent. The maximum educational cost of \$238,100 belonged to graduates of Occidental College, whereas students at University of Alaska (Fairbanks campus) were able to graduate with a minimum cost of \$66,300.

Highest graduation rate of 96% is reported at Stanford University while students at Adams State College (both In-State and Out-of-State) received the lowest graduation rate of 23 percent. Maximum educational loan of \$45,600 was taken by graduates of Dominican University of California whereas graduates at California State University-Los Angeles (both In-State and Out-of-State) were able to graduate with a minimum loan of \$16,420.

CONCLUSION

The results of this study indicate that students from Southwest region of USA enjoyed highest mean ROI (6.69%) along with highest median ROI (6.50%) with minimum standard deviation of 2.03% among all five regional analyzed over 20-year period. Colleges in West region are second to colleges in Southwest as per ROI ranking. Students of colleges in Northeast region had to pay the highest educational cost (\$152,577) over the period of study but they also enjoyed the highest graduation rate of 63.22% among five regions. Yale University reports the highest graduation rate of 98 percent in the nation. Georgia Institute of Technology (In-state) enjoyed highest ROI of 12.30 percent over 20-years period of study.

Table I: Undergraduate College Degree's Return on Investment across Schools in USA

	Mean	Standard Deviation	Median
Annual ROI	5.39%	2.64%	5.50%
Total 4 Year Cost	\$130,233	\$47,642	\$121,900
Graduation Rate	56.71%	17.06%	55.00%
Average Loan Amount	\$27,878	\$5,642	\$27,400
For the Group	Name of School		Value
Maximum Annual ROI	Georgia Institute of Technology(In-State)		12.30%
Minimum Annual ROI	Jackson State University (JSU)(Out-of-State)-MS		-10.16%
Maximum Total 4 Year Cost	University of Chicago(Private)		\$245,000
Minimum Total 4 Year Cost	Elizabeth City State University (ECSU)(In-State)-NC		\$46,500
Maximum Graduation Rate	Yale University(Private)		98.00%
Minimum Graduation Rate	Baker College - Flint, MI(Private)		11.00%
Maximum Average Loan Amount	Clemson University(Out-of-State)		\$51,600
Minimum Average Loan Amount	Colgate University(Private)-NY		\$9,680
Total Number of Schools	1214*		
* Data for additional 64 schools was incomplete and hence dropped from the analysis			

Table II (Panel A): Undergraduate College Degree's Return on Investment Across Schools in Midwest

	Mean	Standard Deviation	Median
Annual ROI	5.19%	2.51%	5.35%
Total 4 Year Cost	\$124,471	\$42,734	\$120,200
Graduation Rate	54.97%	15.82%	54.00%
Average Loan Amount	\$27,916	\$4,833	\$27,440
For the Group	Name of School		Value
Maximum Annual ROI	South Dakota School of Mines & Technology(In-State)		11.94%
Minimum Annual ROI	Ashland University(Private)-OH		-3.30%
Maximum Total 4 Year Cost	University of Chicago(Private)		\$245,000
Minimum Total 4 Year Cost	Missouri Southern State University (MSSU)(In-State)		\$58,900
Maximum Graduation Rate	University of Notre Dame(Private)		95.00%

Minimum Graduation Rate	Baker College - Flint, MI(Private)	11.00%
Maximum Average Loan Amount	Kettering University(Private)-MI	\$45,600
Minimum Average Loan Amount	Drury University(Private)-MO	\$16,160
Total Number of Schools	319*	
* Data for additional 13 schools was incomplete and hence dropped from the analysis		

Table II (Panel B): Undergraduate College Degree's Return on Investment Across Schools in Southeast

	Mean	Standard Deviation	Median
Annual ROI	4.98%	3.02%	5.19%
Total 4 Year Cost	\$116,972	\$41,851	\$107,400
Graduation Rate	51.04%	18.11%	48.00%
Average Loan Amount	\$26,704	\$5,358	\$26,840
For the Group			
	Name of School	Value	
Maximum Annual ROI	Georgia Institute of Technology(In-State)	12.30%	
Minimum Annual ROI	Jackson State University (JSU)(Out-of-State)	-10.16%	
Maximum Total 4 Year Cost	Georgetown University - Washington D.C.(Private)	\$236,700	
Minimum Total 4 Year Cost	Elizabeth City State University (ECSU)(In-State)	\$46,500	
Maximum Graduation Rate	Duke University(Private)	94.00%	
Minimum Graduation Rate	West Virginia State University(Both: In-State and Out-State)	19.00%	
Maximum Average Loan Amount	Clemson University(Both: In-State and Out-State)	\$51,600	
Minimum Average Loan Amount	Southern University and A&M College(Both: In-State & Out-State)-LA	\$12,760	
Total Number of Schools	323*		
* Data for additional 18 schools was incomplete and hence dropped from the analysis			

Table II (Panel C): Undergraduate College Degree's Return on Investment Across Schools in Northeast

	Mean	S.D.	Median
Annual ROI	5.20%	2.19%	5.31%
Total 4 Year Cost	\$152,577	\$50,348	\$148,300
Graduation Rate	63.22%	16.73%	63.00%
Average Loan Amount	\$30,469	\$6,741	\$30,500
For the Group			
	Name of School	Value	
Maximum Annual ROI	Massachusetts Maritime Academy(In-State)	11.52%	
Minimum Annual ROI	Centenary College(Private)-New Jersey	-2.07%	
Maximum Total 4 Year Cost	Columbia University(Private)	\$241,600	
Minimum Total 4 Year Cost	Rhode Island College(In-State)	\$77,300	
Maximum Graduation Rate	Yale University(Private)	98.00%	
Minimum Graduation Rate	Long Island University - Brooklyn(Private)	30.00%	
Maximum Average Loan Amount	University of New Haven(Private)-CT	\$49,200	
Minimum Average Loan Amount	Colgate University(Private)-NY	\$9,680	
Total Number of Schools	299*		
* Data for additional 19 schools was incomplete and hence dropped from the analysis			

Table II (Panel D): Undergraduate College Degree's Return on Investment Across Schools in Southwest

	Mean	Standard Deviation	Median
Annual ROI	6.69%	2.03%	6.50%
Total 4 Year Cost	\$108,743	\$38,354	\$97,400
Graduation Rate	46.42%	16.67%	44.00%
Average Loan Amount	\$25,629	\$6,175	\$24,700
For the Group			
	Name of School	Value	
Maximum Annual ROI	New Mexico Institute of Mining and Technology (In-State)	11.87%	
Minimum Annual ROI	Oral Roberts University (ORU)(Private)-OK	0.25%	
Maximum Total 4 Year Cost	Southern Methodist University (SMU)(Private)	\$229,300	
Minimum Total 4 Year Cost	Northeastern State University(In-State)-OK	\$53,300	
Maximum Graduation Rate	Rice University(Private)	91.00%	
Minimum Graduation Rate	Texas Southern University (Out-of-State)	16.00%	
Maximum Average Loan Amount	Tie- Baylor University(Private)	\$50,400	
	Tie- Texas Southern University(In-State)		
Minimum Average Loan Amount	University of Texas - Pan American (UTPA)(In-State)	\$15,320	
Total Number of Schools	95*		
* Data for additional 3 schools was incomplete and hence dropped from the analysis			

Table II (Panel E): Undergraduate College Degree's Return on Investment Across Schools in West

	Mean	S.D.	Median
Annual ROI	6.09%	2.79%	6.08%
Total 4 Year Cost	\$137,053	\$50,182	\$128,750
Graduation Rate	55.67%	18.29%	53.00%
Average Loan Amount	\$24,862	\$4,645	\$23,680
For the Group			
	Name of School	Value	
Maximum Annual ROI	Brigham Young University (BYU)(Private)	12.28%	
Minimum Annual ROI	Adams State College(Out-of-State)	-6.96%	
Maximum Total 4 Year Cost	Occidental College(Private)	\$238,100	
Minimum Total 4 Year Cost	University of Alaska - Fairbanks Campus(In-State)	\$66,300	
Maximum Graduation Rate	Stanford University(Private)	96.00%	
Minimum Graduation Rate	Adams State College(Both: In-State and Out-State)	23.00%	
Maximum Average Loan Amount	Dominican University of California(Private)	\$45,600	
Minimum Average Loan Amount	California State University-Los Angeles(Both: In-State &Out-State)	\$16,240	
Total Number of Schools	178*		
* Data for additional 11 schools was incomplete and hence dropped from the analysis			

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Developing Sustainable Special Economic Zones in Botswana: A Conceptual Discussion

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INTRODUCTION

The objective of this paper is to explore the concept of Special Economic Zones (SEZ) and suggest sustainable development strategy for Botswana. This objective is achieved through a five stage analysis of the literature. First, a brief description of the concept is made. Second, arguments in favour of externally oriented development strategies for Botswana are presented. Third, a description of the Botswana SEZs policy is attempted. Fourth, two theoretical frameworks, namely, Rostow's modernization theory and the international product life cycle (IPLC) are described. Finally on the basis of the above and related literature lessons or implications for appropriate SEZs in Botswana are presented.

WHAT ARE SEZS?

The term special economic zone (SEZ) is commonly used as a generic term to refer to a specially demarcated area within a nation that offers unique incentives to attract foreign and local direct investment. Special refers to the relaxation of economic laws and immigration policies applicable nationwide so as to benefit firms established within the area chosen as a SEZ. SEZ Authorities act as 'governments' and ruling authorities within the designated zones. There are different types of SEZs, for example, Export Processing Zones (EPZ), Free Enterprise Zones, Free Trade Zones, Free Ports, Science and Technology Park. SEZs companies are treated as operating from outside the country and their goods treated as imports.

SPECIAL ECONOMIC ZONES IN BOTSWANA

The Special Economic Zones policy adopted by the Government of Botswana (Republic of Botswana Ministry of Trade and Industry, 2010) is designed to attract world class domestic and foreign investors by offering them developed infrastructure, state of the art technology and economic incentives. The SEZs would be characterised by economic and other laws that are more free market oriented than that of typical Botswana national laws. SEZs are expected to provide tax and other incentives for boosting exports from Botswana. Specifically Botswana's SEZ policy seeks to establish an authority that would:

- Establish a one stop, full service business environment catering to the needs of businesses located within the SEZ
- Provide a hassle free business environment offering investors a competitive edge in world markets
- Identify locations for establishing SEZs
- Ensure basic infrastructure is in place
- Develop national and international programmes promoting SEZs

- Coordinate SEZ investments
- Provide SEZ incentive packages consistent with Botswana’s domestic and international trade obligations.
- Licence SEZ investors.
- Diversify the economic and export base of Botswana beyond the mining sector.

The government has decided to create eight specialized sectors called “hubs,” which are currently at different stages of development (Figure 1). These are the Agricultural Hub, the Botswana Innovation Hub, the Minerals Hub, the Education Hub, the Health Hub, the Transport Hub and the Financial Services Hub. The aim of the Agricultural Hub is to transform arable and animal production to become a profitable commercial sector. The Botswana Innovation Hub’s (BIH) broad objective is aimed at attracting technology-driven, knowledge intensive businesses. The Minerals Hub is charged with the responsibility of transforming Botswana from a leading rough diamond producer to a world centre for downstream diamond activities. The objective for the Education Hub is to develop Botswana into a regional centre of excellence for exporting educational services. The Health Hub was established with a view to make Botswana a centre of excellence in healthcare service provision. The purpose of the Transport Hub is to strengthen Botswana’s transportation connectivity both internally and externally. The objective of the Financial Services Hub is to facilitate other sectors in terms of banking, investment services and insurance services.

Figure 1: Botswana SEZ Selected Areas



IMPORTANCE OF EXPORT ORIENTED DEVELOPMENT

There are three good reasons why it is vital for Botswana to practice outward looking export oriented development strategy: (1) it is an open economy (2) the need to diversify the export base and (3) the limited local market.

Botswana is an Open Economy: In Botswana external trade is an important component of the economy. The importance of external trade in an economy is measured by the degree of "openness" which is the magnitude of trade (exports plus imports) in relation to the GDP. This ratio was 72% in 2015 in Botswana (Trading Economics, 2016). The ratio for India is 13%; it is much lower than that of Botswana. That of the USA is 25%. These figures suggest that India and the USA are relatively closed economies in the sense that they are relatively self-reliant. On the other end Botswana is an open economy in the sense that she is highly dependent on foreign trade.

The implication of the openness ratio is that the economy of Botswana is sensitive to economic conditions in the outside world. Hence changes in the prices or volumes of exports or imports are likely to have substantial effect on the performance of the whole economy. The 2008 global financial crisis attests to this. Botswana cannot afford to ignore what is happening in the rest of the world.

Need to Diversify the Export Base: Botswana's success story is based on exports and the base is unbalanced: it is dominated by diamonds which accounts for more than about 80 percent of exports. The recent global financial crisis has revealed that this commodity is highly vulnerable to external shocks. It goes without saying that there is need to diversify the export base in order to reduce the risk of over-reliance on one commodity.

Limited Local Market: The domestic economy is too small to thrive on its own (Khama, 2010). Botswana has a relatively small population, estimated at 1.8 million in 2009. This imposes a severe limit to growth because of a limited local market. This constraint means that the envisaged diversification must be mainly externally oriented. In deed the externally oriented diversification strategy has been found by many small emergent economies such as South Korea, Hong Kong, Singapore and Taiwan to be an effective means of achieving rapid economic growth.

The search for ways to diversify the export sector in order to promote sustainable development is a major policy issue in Botswana today. In order to diversify the export base, at least three broad policy options can be considered in the context of Botswana (Marandu, 2006).

Import Substitution Industrialisation: The first is import substitution strategy; that is, the domestic production of that which would have been imported. The advantage of this strategy is that it is less risky, for the businessperson plans for an assured domestic market. The problem with import substitution is that the choice of industries must be consistent with a country's comparative advantage.

Export-led Manufacturing Industrialization: The second method for diversifying is through export expansion rather than import substitution. Proponents of this strategy argue that export expansion is an outward looking strategy and holds better prospects for long-term growth than inward looking import substitution strategy, partly because it discourages misallocation of resources. Outward-looking theorists claim that an inward-looking country will stagnate and lose the dynamic benefits of trade (Goff, 2003). On the other hand inward-

looking theorists suggest that a country is doomed to providing low-growth primary products for developed countries if it remains fully open to trade. They argue that there is no assurance that an export-led strategy will perform well in the short-term because of market and supply constraints. Furthermore, they argue that, even the outward looking export orientated countries such as Japan and Chile undertook a certain degree of inward-looking policies protection (Essays..., 2006).

The debate between export-led and import substitution strategies has not been settled one way or the other. It is possible for a developing country to mix policies. For example, maintaining an outward-looking policy on trade in primary products but an inward-looking one for secondary products as it tries to nurture infant industries. Others argue that these countries in fact pursued mixtures of policies targeted at specific industries.

Moreover, it is becoming increasingly evident that the choice of an inward or outward looking strategy depends on conditions of the country in question. For instance, large countries with large markets may try, with some success, an inward looking strategy. On the other hand small countries with limited markets are more likely to succeed if they follow outward looking development strategies. The success of outward looking strategies by the small Newly Industrialising Countries of Korea, Hong Kong, Singapore and Taiwan are examples, which support this line of reasoning.

Export of Services: Tourism is currently Botswana's most rapidly growing sector and contributes 15.9% of its gross domestic product (GDP). The government's tourism policy emphasises the promotion of environmentally sensitive, low-volume, high-cost tourism. A diversification strategy could be developed to accelerate and take advantage of this growing service sector.

The various strategies are not mutually exclusive and can be pursued simultaneously. At any one point in time the country may emphasise one or the other. This study is mainly concerned with the export strategy. In order to diversify the exports base by using conscious strategies, policy makers need to understand the obstacles to exports in Botswana. This study aims at making a contribution toward that end by focusing on obstacles to exports by manufacturing firms.

SPECIAL ECONOMIC ZONES AND THEORY

The aim of this section is to present theoretical models which can assist policy maker in evaluating the suitability of the various SEZs in a local context. In accomplishing this, we conducted a scan of the literature, to identify a suitable theoretical framework for understanding modernization of nations. The literature scan identified two theories: The Rostow Model of Development and the International Product Life Cycle Theory. The two theories facilitate understanding of appropriate SEZs in a specific situation.

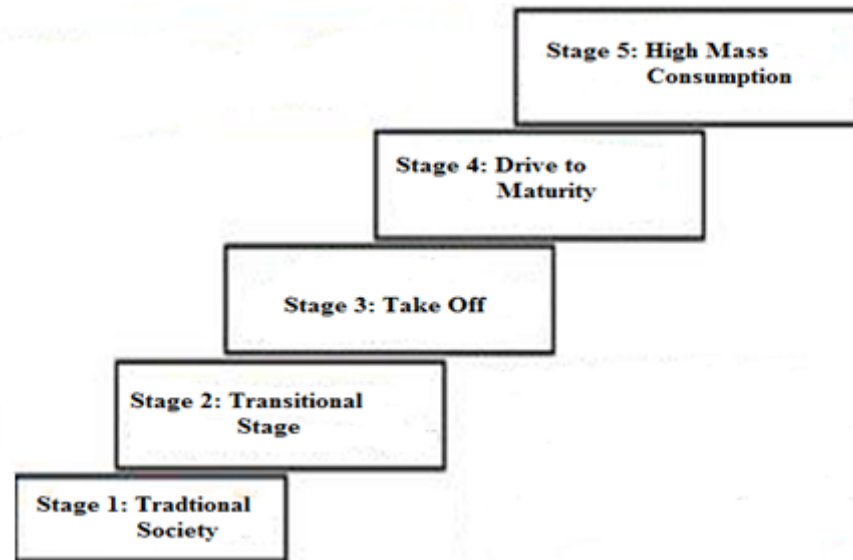
The Stages of Development Model

The Stages of Development Model was created in 1960 (Rostow, 1960). The model suggests that developed countries have tended to pass through five linear stages (Figure 2) to reach their current degree of economic development. These are:

1. Traditional society. This earliest stage is characterized by heavy dependence on "primary sector" activities. Production is characterized by being subsistence, labour intensive, limited technology, low productivity in agriculture or hunting or gathering.

The outputs are consumed by the producers, very little of which is saved or traded and the only trade that exists is barter trade of items needed for subsistence, not done for profit. Other than the land for food production there is limited exploitation of raw materials and so the development of other industries is also restricted.

Figure 2: Stages of Economic Development



2. Pre-conditions for take-off. In the second stage agriculture becomes more mechanised resulting in more output for trading. Savings and investment grow although they are still a small percentage of national income. Other industries start to emerge although one will take dominance (this is usually textiles) and resources start to be exploited. The sources of the finance are normally from external demand for raw materials, overseas aid, foreign direct investment or remittance income from migrant workers living overseas.
3. Take-off. In the third stage manufacturing industry assumes greater importance, although the number of industries still remains small. Political and social institutions start to be transformed to help maintain a steady rate of growth. Savings and investment grow, perhaps to 15% of national income. External finance may still be required. Agriculture assumes lesser importance in relative terms although the majority of people may remain employed in the farming sector. There is often a dual economy apparent with rising productivity and wealth in manufacturing and other industries contrasted with stubbornly low productivity and real incomes in rural agriculture.
4. Drive to maturity. In the fourth phase growth becomes self-sustaining as the economy moves away from being dependent on primary factor inputs for growth towards making better use of innovation to bring about increases in real per capita incomes. Industry becomes more diverse resulting in goods being produced at home instead of being imported. New import requirements and new export commodities develop, resulting in an economy which forms a part of the international market. The most advanced technology available is used by all economic activities and between 10 and 20 percent of national income is invested. Growth spreads to different parts of the country as the state of technology improves.
5. Age of mass consumption. In the final stage as output levels grow, it enables increased consumer expenditure. During this phase emphasis is given to consumer durables and services that allow the majority of a country's population to attain a relatively high standard of living. The initially exploitative "primary" industries move elsewhere as the

remaining industries shift production to durable consumer goods and services. There is a shift towards “tertiary sector” activity. One of the main shifts that occur as a country moves through the five stages is within the industry sector as activity shifts from primary, secondary and tertiary sectors; and the changes that happen here get reflected in the employment sector (Table 1).

Table 1: The Stages Model and Changes in Industry and Employment

	Primary Sector	Secondary Sector	Tertiary Sector
Traditional Society	Vast Majority	Very Few	Very Few
Pre-conditions for Take-off	Vast Majority	Few	Very Few
Take-off	Declining	Rapid Growth	Few
Drive to Maturity	Few	Stable	Growing Rapidly
Age of Mass Consumption	Very Few	Declining	Vast Majority

Implications of the Stages Theory for Investment

In general, the goods, services and investment needed by a country in an earlier stage of economic development are different from the goods and services required in later stages as follows. People in less developed countries place more emphasis on utility (basic product) and place relatively little value on aesthetic (beauty, extras) as much as do people in the more developed nations. A less developed country may need to import industrial machinery and equipment to exploit its raw materials and to produce agricultural products, as well as basic construction equipment to develop a transportation system. It may need management consulting, accounting systems, and training and development services.

When the country becomes fairly well industrialized, producing capital and consumer goods such as machinery, automobiles, and refrigerators, it may need more specialized and heavy capital equipment not yet manufactured there. For example, a country producing automobiles may need more modern equipment, such as wheel alignment indicators.

In the fifth stage, a country reaches complete industrialization. Even though a country may be totally industrialized, a demand for goods from another country still exists, because highly industrialized countries tend to specialize in the production of certain goods. For example, U.S. enterprises are highly skilled in producing communications and sophisticated computer technologies, and Japanese enterprises are highly skilled in producing process technologies.

International Product Life Cycle (IPLC)

Another theory helpful in understanding appropriate policies for SEZ is the International Product Life Cycle (Vernon, 1966; Igal, 1981). It is useful as an explanation of who produces what and why. It is simple and persuasive. Briefly the Life Cycle Theory assumes that in general, trade in manufactured goods typically follows a cycle with four main phases: Introduction, Growth, Maturity and Decline (Figure 3).

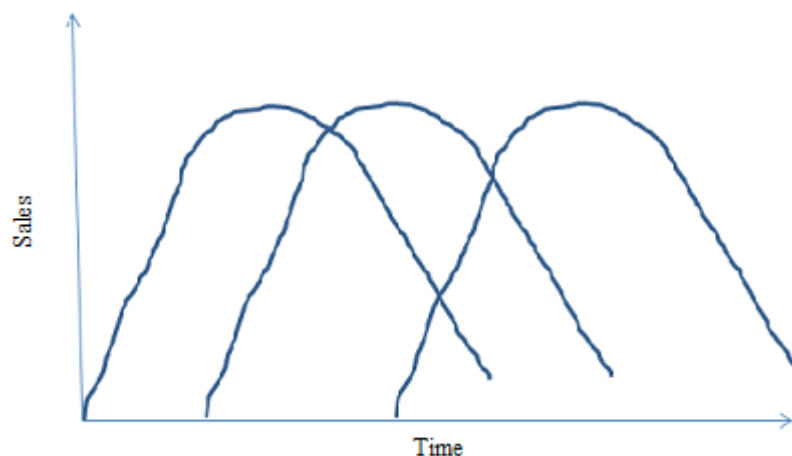
Introduction: The introduction stage is marked by innovation, production, and sales in same country. During the early stages of the cycle a product is first produced in the country which has discovered it. The new product is for use in the local market and for export. In this early stage of the cycle, comparative advantage rests with the innovating country because of "technological gap" between the innovating country Vis-a-Vis the others places the innovating country in a monopoly position. In the initial phase of the cycle, usually, manufacturing occurs in a developed country, such as the US, where the innovator is motivated by a potentially profitable market.

Growth: In phase two, growth of demand in the importing nations may provide sufficient volume to justify local manufacture. As production begins abroad, the exports of the initiating nation grow less rapidly because other producing countries take a share of the market in their own country and other export markets. In the second phase of the cycle, usually manufacturing occurs in other advanced countries, say in Europe.

Maturity: The third stage occurs as the product matures. A mature product uses an already established technology and a lower skilled labor content. In this situation, the less developed countries may be able to undersell the more advanced countries by applying their cheap less-skilled labor to the technology already designed to product. Thus the less developed nations may become attractive production points and begin exporting the product to more advanced countries. Examples of products which are in this latter stage are textiles and electronic components.

Decline: The Decline stage is characterized by concentration of production in emerging economies. The innovating country becomes a net importer of the product it innovated in the first place. This means that comparative advantage shifts from one nation to another as a product matures.

Figure 3: PLC of Different Countries for a Specific Product



POLICY LESSONS AND SUGGESTIONS

The theoretical literature reviewed leads to the following implications for advising policy makers interested in creating sustainable SEZs in Botswana. Botswana has the potential to derive benefits from special economic zones. The country is in need of diversification and it is in the early stage of industrialization. To diversify, the country needs to attract private investment. SEZs can support diversification in the country if they are implemented effectively by overcoming infrastructure constraints and taking advantage of economies of scale within SADC and SACU trade preferences. Thus, there is a good argument in support of SEZs as a

policy instrument for diversification, but not an unconditional support. There are certain preconditions for successful implementation of a zone programme in the country:-

Attract Export Oriented Firms

Botswana should strive to attract into the SEZ firms that export the bulk of their output to be exported to foreign markets, as opposed to import substitution SEZ that sell a bulk of their output to the local economy. The domestic market is too small for sustained growth. This policy is consistent with the SEZs that were part of an export oriented strategy that has characterized many Asian economies since World War II. In fact Japan was the first to develop such a strategy in the region.

To attract investors the following incentives should be considered for offering to foreign investors. Labour: The ability to use the Botswana vast pool of low cost unemployed labour may be promoted as a powerful incentive to locate in the proposed SEZs. In addition the firms should be given the liberty to hire and fire labour, which is different from the prevailing lifetime permanent and pensionable system or collective bargaining. Land: The SEZs should be physically developed as planned entities with infrastructures and access to a container dry port complex so that parts and raw material could easily be brought in for processing and shipped to foreign markets. Since Botswana is a landlocked country, accessibility to port infrastructures of neighbouring countries with such facilities should be a dominant factor in the planning of sustainable SEZs strategy. Tax incentives: Custom duties should not be levied on imported materials and parts as long as they are for re-export.

Which Export Oriented Industries to Attract?

In order for the zones to be sustainable, the zone programmes must be based on Botswana's comparative advantages. With this in mind we can speculate on three industries that the country may be advised to promote under the SEZ model because the nation has comparative advantage in them:

- i. The first is land-intensive natural-resource-based sectors (mining) and agriculture (leather industries) in the short term. Their potential is in increasing beneficiation through processing activities that are one stage or more downstream from production. The manufacturing or processing, activities that are envisaged should be focused on sectors in which Botswana has comparative advantage in inputs. Focusing zones around these sectors increases the likelihood of local economy capturing the spillovers from foreign direct investment by creating zone linkages with the local economy through integrating local raw materials and intermediate inputs. In fact one of the reasons for failure of several African zones has been identified as tendency to become enclave economies, without development of backward and forward linkage industries with the local economy (Centre for Education and Documentation, 2009).
- ii. The second which the country has comparative advantage is the development of Botswana as an important touristic destination for domestic, regional and international tourism. In pursuing this, one must bear in mind that Botswana suffers from several disadvantages in regard to air connections with Europe and other source markets.
- iii. The third is transforming Botswana into a transportation hub for transit cargo and passengers by enhancing connectivity with neighboring Zambia, Namibia, Zimbabwe, Angola and South Africa. The strategy should aim at developing efficient cross-border road and rail transport linkages. The plan may involve long-term removal of road damaging trucks from neighboring countries by operating regional railway system that carries goods to a dry port on the Botswana border. This will reduce the number of

foreign trucks that cause damage and accidents on the roads and increase the amount of money collected as transport charges by Botswana.

Take into account the Stage of Economic Development.

Goods and services needed by a country vary by stage of economic development; hence the kind of SEZ promoted by Botswana and the level of incentives used must be appropriate for the level. With regard to type of SEZ, since the stages model assumes nations go through the stages sequentially, this implies that the type of investments to be promoted in Botswana should be those that will propel the nation into the next stage. Botswana has not yet reached the take-off stage. Industrialization has not yet taken a centre stage in the economy which is still dominated by natural resources, mainly minerals. Infrastructure shortcomings continue to represent a significant obstacle to improvement in productivity in Botswana. However the cheap labour in the country as well as the generous incentives provides opportunity for industrial FDI to flow into the country that would help diversify the economy from natural resource based economy to a more industrialized one. With regard to the level of incentives, tax concessions to investors should be considerably more generous during the lower stages compared with those during higher stages of development.

Take into account the products' stage in the International Product Life Cycle.

In planning SEZs it is important to take cognizant of two aspects in relation to the general stage of the life cycle of the products or services to be promoted. First, the stage of a product on the life cycle is normally different in different export markets. That is, a product that is new in one export market may be out-of-date in another market. There is saying in which says: "Yesterday's product in the USA is today's product in the UK and tomorrow's product in Africa". Second, the PLC theory assumes by implication that products in the later stage of the cycle utilize inputs which are relatively abundant in developing countries. This may be misleading. A distinction must be made between labour intensive mature products and capital intensive mature products. It is the former type of products which are more consistent with the comparative advantage of developing countries.

The theory therefore suggests that the zones in Botswana should focus on labour intensive, mature industries such as textiles, leather goods and building materials. This recommendation is consistent with the observation that "comparative advantage shifts from one nation to another as a product matures". In deed this is what is happening currently in China. Labour costs in China have risen faster than consumer inflation for years, and are currently nearly four times those in Bangladesh, Laos, Cambodia and Myanmar (Magnier, 2016). China is now losing low-end manufacturing to lower labour especially textile and clothing manufacturing.

Avoid the Race to the Bottom

In competing for FDI Botswana should avoid the so-called "race to the bottom" syndrome whereby SEZ costs, in terms of the various concessions granted to investors, outweigh their benefits. Nobody wins a race to the bottom. The government should periodically make a cost-benefit analysis of SEZs investment. It should be noted that the government is likely to make substantial investment in infrastructure and provide a variety of tax concessions to the firms in the zones. One must compare these costs with achievement of the purposes for which the SEZs were founded such as earning revenues and foreign exchange and creating employment. Does the contribution of the SEZs to the country justify the investments? Or could the resources have been utilized better in the economy?

Host nations engaging in promoting FDI through aggressive financial concessions believe that investors are highly economic-sensitive. They offer more of the same as competitors. Botswana

should consider promoting FDI through differentiation by focusing on it being a peaceful, stable democracy on the continent. This can be a powerful incentive especially in this period when terrorism threatens global development.

SEZs are a Transitory Policy Instrument

The theories of “Stage of Economic Development” and the “International Product Life Cycle” imply that SEZs are effective only as transitory policy instruments during the first phases of industrialization and implementation of export-led growth strategies. SEZs are attractive to investors because of the existence of policy failures in the host country; as liberalization continues investors will see no need for staying in the SEZs. As countries achieve higher levels of economic development and income, the relative significance of EPZ in economic terms can be expected to decline.

Thus, Botswana’s export-led growth strategies cannot rely solely on SEZs to achieve higher levels of economic growth in the long-term. The country should acknowledge the transitional aspect of SEZs, and manage wisely the opportunities they may bring to upgrade labour and managerial skills, acquire superior technology and access foreign markets. In other words, SEZ should be a part of a more extensive package of policies aimed at improving the international competitiveness (Jenkins, Esquivel, & Felipe, 1998). For example, establishing an export processing zone in an economy that has already reformed its macroeconomic policies is not recommended on two grounds: (1) Low FDI flows may be due to inadequate legal or regulatory framework or economic incentives in other areas of the economy (for instance: private property or labour laws) and (2) SEZs are distortionary economic policy instruments and will re-introduce an element of discretion into the policy environment. Successfully incorporating SEZs into the national economy will require periodic revisions of the SEZ laws to accommodate changing national economic conditions. On the other hand, domestic reforms should be formulated so that eventually the same incentives and benefits apply to all firms.

The Role of Government

The whole discussion in this paper suggests or implies that SEZs are effective in countries with strong state involvement. The commitment at the highest level of government to comprehensive export-driven growth policies is a precondition for success of the SEZs policy in Botswana. The policy requires commitment of funds to a massive development programme. When the government does not have the money it can look out for potential private partners who are willing to invest in that area; thus a win-win situation for both.

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Experimental Investigation of the Relationship between Knowledge Management and Organizational Innovation and Creativity in the District 5 of Tehran Municipality

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Abstract

In the present research, effort is made to study the relationship between knowledge management and organizational innovation and creativity district 5 in the municipality of Tehran. This research has been implemented as a survey and the data and information is collected using a questionnaire. The statistical community, including all district 5 municipal staffs. Among different deputies of organization, using the method of multistage cluster sampling proportional to size, 90 individuals were chosen as samples. The findings of the present investigation have shown that, there is a significant relationship between all the components of knowledge management and organizational innovation. As well as the findings of regression analysis shows that the effect of knowledge management independent variable on the organizational innovation is significant and can be fitted to 2.7% of the dependent variable changes of the foregoing explication. The beta coefficient suggests that the pure effect of knowledge management variable on organizational innovation is (219.0) and is fitted for influencing positive also. This means that the increase in the rate of knowledge management results in the increase of organizational innovation and vice versa.

Keywords: Knowledge management, Knowledge production, Knowledge transfer, Organizational innovation, District 5 of Tehran municipality.

INTRODUCTION AND EXPRESSION OF THE PROBLEM

Knowledge is a valuable source that will empower organizations to innovate and compete. This knowledge could be among the staff to be aware of their part. Also having a management process actually creates a system in the organization in which the knowledge work is systematic, and in order to turn knowledge into capital goods, organizations need to try to create a balance between management activities. The process of knowledge management can result in the creation, dissemination, and the use of knowledge in the organization. In fact, knowledge management, in its ultimate goal, seeks to increase the smartness and raise the IQ and intelligence of the organization.

In the knowledge Organizations, knowledge can simply be transferred to the staff. When staff access to organizational knowledge, they know their environment and make it meaningful. They can find new and better methods in their expertise, make it meaningful, and run it up in the implication to enhance the efficiency of the organization too.

Therefore, according to the above description, it can be inferred that knowledge management means: "process, creation, diffusion of knowledge and applying it in order to achieve organizational goals". We live in an era where knowledge is power, and knowledge capitals

operate as a power tool. The task of knowledge management is to manage knowledge capitals of the organization which must undergo a process to reach its goals. Man in his evolutionary history and social evolution has managed to produce and use knowledge to create changes in the society.

Knowledge management in the new era caused tremendous developments in establishing management topics. Knowledge management seeks to capture the knowledge, wisdom, and the value added experience of the staff and also implementation, recovery, and maintenance of knowledge as the properties of organization. As Peter Drucker said, "the secret of organizations' success in the 21st century is knowledge management." Therefore, management of the organizations should adopt a superior knowledge to make more reasonable decisions on the important issues and improve knowledge-based functions. Hence, knowledge management is more important than the knowledge itself which looks for to know how to transform individual and organizational information and knowledge to the knowledge and skills of team and individual in organizations. (Glasar, 2003:214). Although many organizations already have invested in the field of the development of knowledge in the different levels and have been successful, many organizations have failed.

Knowledge management is one of the relatively new topics in the field of management science. This new management practices quickly welcomed by the management specialists, and extensive effort is made to exploit the potential knowledge of individuals in the organizational productivity. Knowledge management actually is the way that based on it, we can access to the hidden findings of individuals' knowledge which in many cases have a significant value. This management approach tries to encourage the spirit of participation and integration in the organizations, and widely put forward collective thinking and sharing ideas. Managers also are trying to use techniques of information and knowledge extraction out of people, and then save and publish it to find a way which may help them in the organizational productivity.

The most important factors underlying the structure of the knowledge-based organization is the structure, culture, and information technology. The success of an organization in the implementation of a strategy, including knowledge management, up to a large point, depends on the organizational culture underpinning and support it gives to that strategy. Efforts of organizations to become a knowledge-based organization will be successful if the characteristics of the required culture for the implementation of knowledge management in the organization are present. Information technology plays an important role in the implementation of knowledge management. Perhaps one of the most important effective factors is the expansion of proper infrastructure of information technology and organizational structure.

Large companies such as Microsoft (the most high-value company in 1998) are the owner of nothing valuable but knowledge and information. Their economic play is to maintain their scientific and technical property policy and expand their realm of knowledge and expertise. Professionals discover new knowledge, invent new products and new processes, manage manufacturing processes, maintain complex machines and equipment very well, and even apply new tools and processes which are the result of knowledge advancement. The creation of human capital due to their nature is a social process, not individual's. Expertise and technical skills of humans grows only when a generation transfers what he's learned to the next generation so as to not spend his time on rediscovering what has been discovered before, but to spend his time and force to advance the existing knowledge and gain new expertise and technical skills. Based on the research conducted by Nonaka and Takeuchi, knowledge creation

and knowledge management of Organizations has always been neglected in management research and particularly in government agencies (Gandhi 2004: 81).

First, to make innovation happen in the Organization, it is necessary for the managers to have the necessary knowledge regarding the internal and external factors that affect the organization. Second, the knowledge must flow freely across the organization. The better knowledge is flowed and published; the possibility of innovation is higher, because more individuals in different positions and levels of the organization are exposed to the new knowledge which interacts with their existing knowledge. Therefore, the present paper is trying to study the influence of knowledge management components and its relationship with organizational innovation of district 5 of Tehran municipality.

RESEARCH LITERATURE

Empirical research literature

Rezai et al. (1393) conducted a study titled "factors affecting the implementation of the knowledge management system in the health center of arsanjan town". The findings of this research suggest that, generally, organizational culture, organizational structure, and the capabilities of information technology are effective factors in the implementation of the knowledge management system in the health center of arsanjan. Also according to the provided model, information technology has a role in mediating the relationship between organizational structure and culture with knowledge management. GFI model goodness of fit index in this research equals to 907.0 which indicates goodness of fit index.

Boondao (2013) in a study entitled "factors affecting knowledge management of organizations in Thailand» showed that individual factors such as gender, age, status and education level does not impact on the implementation of effective knowledge management programs. As well as the results of his research suggests that organizational factors such as infrastructures and organizational measurements are effective on the implementation of effective knowledge management programs.

Lopez et al (2009) have investigated the role of information technology and the organizational structure in the implementation of knowledge management. The results of their research showed that capabilities of information technology have direct and indirect effects on the process of knowledge management. In addition, the results of Lopez et al research showed that the organizational structure has a significant impact on knowledge management.

Johnson (2008) with the aim of evaluating the innovation as a component of knowledge management, studied every indices of knowledge management distinctly according to coming up with new ideas, innovation, performance, discovery of a competitive advantage, and other organizational objectives, and showed that each of the knowledge management indices separately leads to higher effectiveness of the organization.

- Levy and Hazzan (2007) also consider knowledge management as a practical aspect of organizational culture and stated how cultural changes are founded by the organizational agility, and have expressed that this change in culture requires knowledge management initiative. They also discussed the applying of the empowerments of knowledge management from the perspective of the agile software engineering and stated how to increase agility through data mining and knowledge management.

- Al Alawi (2005) in a study stated that the implementation of knowledge management is not successful in most organizations, since these organizations have not spread enough information technology and issues related to human, cultural, and organizational development, which is essential for the successful implementation of knowledge management, has been ignored.

THEORETICAL LITERATURE

Knowledge management

As the issue of knowledge management for the first time in 1994 Annual Report Swedish company, a leading financial service called Skandia began. The report contains a series of financial analysis which was trying to quantify the value of the company's intellectual capital. This company achieved a quantified aspect which was on spotlight since old times: The Intellectual capital plays a role in financing sustainable incomes at least as much as the size of the traditional financial capital. Skandia proved a matter which managers had speculation and suspicion about for years: knowledge is a valuable asset like other assets needs management, development, and utilization. (Rading 2004:1. (But discussing the knowledge as a vital factor in maintaining competitive advantage firms is not a new thing. Alfred Marshall for more than a century in a book called principles of microeconomics stated "knowledge is our most powerful engine of production" (Marshall, 1999:65). After the Second World War, several scientists also emphasized on the importance of the role of knowledge in economics .Since knowledge management has been studied according to different approaches, as well as, many definitions have been stated, a definition could not be found that a global agreement about it exist. Davenport believes "knowledge management is an effort for the discovery of latent assets in the minds of people and the conversion of this hidden treasure to the Organization's assets so that a wide range of individuals who are involved in the Organization's decision makings can access to the wealth and use it (Davenport, 1998:16). Another author defines knowledge management: knowledge management attempts to make staffs' knowledge (human capital) to a common organization (the structural intellectual capital) (Gandhi 2004:69). According to Schein, knowledge management is a process is that makes it possible for the organization to employ the new knowledge as validation, distribution, and application and thus the range of organizational characteristics with enabling the company to improve the performance of "smarter" (Schein 2001: 5).

Types of knowledge

The entire knowledge sources are likened to an iceberg which its visible part is explicit knowledge. This part of knowledge can be easily accessed to, identified, and shared. The hidden part of the mountain is what is referred to by the term "tacit knowledge". This episode is a reminder of famous words of Michael Polanyi (1966), which said: "We know more than we can state" (Polannyi1966: 211). Explicit knowledge is the knowledge that can be coded. Examples of this type of knowledge are books, articles, lectures, organizational and other similar documentation compiled methods. In contrast, tacit knowledge is the knowledge that is not easily to be coded. This knowledge, usually within human beings, is the practice of the organization, and even the culture of the communities and organizations implied. Nonaka and Konno (1998) believe that tacit knowledge is highly personal and abstract and hardly expressible. That's why they focused on the dissemination problem of tacit knowledge and also believe that experience is one of the main sources of knowledge creation (Nonaka and Konno 1998: 211). Although tacit knowledge management is far more difficult than explicit knowledge, its value in a competitive advantage in the organization is more. For an efficient knowledge management, the capture of both tacit and explicit knowledge is essential. The real challenge of knowledge management is to have the ability to discern and capture the tacit knowledge so as to be retrieved whenever it is needed. Most of the organizations only focus on

explicit knowledge management which is easy to gain and comprise only 20 percent of the total knowledge of the Organization and they use tacit knowledge haphazardly. Converting tacit knowledge to explicit knowledge is difficult, but not impossible (Gandhi 2004: 375).

Knowledge management benefits

Measurement of capital benefits associated with knowledge is one of the most difficult and challenging modern business topics based on converted knowledge. Quantifying the knowledge is impossible, and it is not so simple to measure the direct results of knowledge management. Benefits of applying knowledge management activities, from technical to strategic level, will affect on the level of culture and productivity of the entire organization. Some of the benefits include:

- Improvement of the competitive responses: empowering organizations to build responsiveness to changes in the market and accelerating time-to-market manager products.
- Reduction of costs and avoid wasting intellectual capital: the capture of tacit knowledge allows the organization to apply that knowledge to maintain the processes for the future application, and removes costs of retraining staff and the professionals.
- Meet needs for global action: Actions which are geographically dispersed need particular challenges in the cultural and knowledge management fields. Organizations that have effective knowledge management can end the spirit of "them and us", and turn whatever that are into "we" and enable the efficient utilization of the dispersed resources maximized.
- Job effectiveness: To implement knowledge management infrastructures, destroys traditional constraints, increased knowledge sharing among staffs, and thus improves the effectiveness.
- Organization effectiveness: tools, templates, and the best applications of knowledge management that is associated with the culture of knowledge sharing culture. A collaboration environment is shaped and the effectiveness of the organization is increased.
- Determining strategic direction: using knowledge culture, improves the creativity and innovation consequently, impacts on the strategic direction (Sivan 2000: 354).

Organizational innovation and creativity

Innovation is meant to fulfill a creative thinking, and organizational innovation is the key to success in the repetitive field of organization. When the topic comes to the word innovation, our attention unintentionally is paid to product innovation and sometimes the production process, and even in some cases, there is no discussion about service innovation. But innovation in the process, marketing, and also management is necessary. When you talk about the importance of innovation and mechanism, we should note that only it is in a "world" competitive environment that we can talk about these concepts.

Importance of organizational innovation in today's situation is very much to win and the survival of companies involved in the competition; because the innovation serves as a decisive element for companies in this situations (saeedi et al., 2010). Innovation is a new or upgraded thing that is in an organization in order to create added value either directly for organization or indirectly for customers. On this basis, innovation can have different aspects, including being fitted to be the innovation as "the process of creating a new technology", "improvement process and upgrading the existing technology", and "the process of converting opportunities into practical operation". Basically, from the perspective of management, it is a process that starts with an idea and ends in a commercial release of improved procedures and new

technique in the production of a product or new service (fakour and Ansari, 2009). Innovation in the provision of the product, including the production of new goods and products, introducing them to the market, and the most important backing is having pristine and new bearing ideas which can produce new product processes, and be used in more efficiency and effectiveness of the organization. One of the procedures for this work is providing the necessary situations to encourage individuals and organizations to offer an idea of innovation which can propel the organization or company to the organizational innovation. Staffs' ideas and talents are the main capital in organizations that act out in this way (saeedi et al).

RESEARCH HYPOTHESIS

The main hypothesis

There is a relationship between knowledge management and organizational innovation.

The subsidiary hypotheses

1. There is a relationship between knowledge creation and organizational innovation.
2. There is a relationship between knowledge storage and organizational innovation.
3. There is a relationship between knowledge distribution and organizational innovation.
4. There is relationship between applying the knowledge and organizational innovation.
5. Knowledge management has a positive impact on organizational innovation.

Research methodology

This research has been implemented in the form of a survey and since the results of this research can be used practically, it is considered as practical part of applied research. The data of this research have been collected at a specified period of time; therefore, according to the time of collecting the data, it is a type of cross-sectional research.

Data and present research information are collected using a questionnaire. The statistical community, including all district 5 municipal staffs. Among different deputies of organization, using the method of multistage cluster sampling proportional to size, 90 individuals were chosen as samples.

Validity and reliability of the data collection tools

To obtain test validity in this investigation, the face validity is used. In this way, we used the tips and comments from some experts, and then reviewed the questionnaire questions and resolved uncertainties. To assess the validity, cronbach's alpha test is used which its results are presented in the following table.

Table 1: Cronbach's alpha coefficients of research main variable

Variable		Number of Questions	value of cronbach's alpha test	
Knowledge Management	Knowledge Creation	8	0.78	0.88
	Knowledge Storage	9	0.72	
	Knowledge Transferring	8	0.89	
	Knowledge Applying	5	0.77	
Innovation		7	0.86	

Research findings analysis

For the statistical analysis of question responses various methods can be used, the use of which is subject to the conditions and a researcher must have it his mind in relation to his research.

Descriptive data

First, the collected data with the planned and prepared frequency distribution table is presented in short, and eventually they are interpreted using the other parameters of descriptive statistics (central parameters, mean, median, mode, variance, and standard deviation). In the following table, rating variables is based on mean and variance. It can be concluded that the more mean is, the better variable status is. Thus, mean ranking is based on the value, on the other hand, variance indicates the distribution of the replies. Generally, the smaller variance is, the lower distributions of responses are. And therefore, that variable is located in better status. The following table is a general descriptive data illustration:

Table 2: Descriptive ranking of measured variables

Ranking	Measured Variables	Frequency	Median (Ascendant)	Median	Mode	Variance (Descendant)	Standard Variation
1	Knowledge Creation	90	4/075	4	4	0/53169	0/7291
2	Knowledge Storage	90	3/975	4	4	0/59259	0/7697
3	Innovation	90	3/8	3	3	0/62756	0/7921
4	Knowledge Transferring	90	3/7917	4	4	0/68768	0/8292
5	Knowledge Applying	90	3/75	4	4	0/71111	0/8432

As it is shown, the results of both ranking are the same, in other words hypotheses with significant higher mean, have lower variance.

Analytic data

Hypothesis 1: There is a relationship between knowledge creation and organizational innovation.

Pearson correlation test between knowledge creation and organizational innovation

Table 3: Correlation test between knowledge creation and organizational innovation

Variable	Pearson correlation coefficient	P-value
Knowledge Creation and Organizational Innovation	0/214	0.000

The above table represents the coefficient of correlation between knowledge creation and organizational innovation. Due to the correlation coefficient and also P- value, it can be stated that the relationship between knowledge creation and organizational innovation is positive and meaningful.

Hypothesis 2: There is a relationship between knowledge storage and organizational innovation.

Pearson correlation test between knowledge storage and organizational innovation

Table 4: Correlation test between knowledge storage and organizational innovation

Variable	Pearson correlation coefficient	P-value
Knowledge Storage and Organizational Innovation	0/365	0.000

The above table represents the coefficient of correlation between knowledge storage and organizational innovation. Due to the correlation coefficient and also P- value, it can be stated that the relationship between knowledge storage and organizational innovation is positive and meaningful.

Hypothesis 3: There is a relationship between distribution of knowledge and organizational innovation.

Pearson correlation test between the distribution of knowledge and organizational innovation

Table5: Correlation test between knowledge distribution and organizational innovation

Variable	Pearson correlation coefficient	P-value
Knowledge Distribution and Organizational Innovation	0/243	0.000

The above table represents the coefficient of correlation between knowledge distribution and organizational innovation. Due to the correlation coefficient and also P- value, it can be stated that the relationship between knowledge distribution and organizational innovation is positive and meaningful.

Hypothesis 4: There is a relationship between applying knowledge and organizational innovation.

Pearson correlation test between applying the knowledge and organizational innovation

Table 6: correlation test between applying knowledge and organizational innovation

Variable	Pearson correlation coefficient	P-value
Knowledge Applying and Organizational Innovation	0/286	0.000

The above table represents the coefficient of correlation between applying knowledge and organizational innovation. Due to the correlation coefficient and also P- value, it can be stated that the relationship between applying knowledge and organizational innovation is positive and meaningful.

Hypothesis 5: Knowledge management has a positive impact on organizational innovation.
Regression analysis of knowledge management for organizational innovation

Table 7: Regression analysis of knowledge management for organizational innovation

Knowledge management for organizational innovation	Correlation coefficient (R)	R- Squared	β coefficient	(Constant) B	P-value
	0.219	0.027	0.219	9.451 0.886	0.000

Table 6 shows that knowledge management independent variable has a meaningful impact on the organizational innovation and can specify 2.7% of the changes of the aforementioned dependent variable. The β coefficient suggests that the pure effect of knowledge management variable on organizational innovation equals to (219.0), and is fitted for positive influencing also. Therefore, the hypothesis of the existence of the relationship between knowledge management and organizational innovation can be confirmed. Of course, it should be noted that the type influencing is positive. This means that the increase in the rate of knowledge management leads to the increase of organizational innovation and vice versa.

DISCUSSION AND CONCLUSIONS

The most important goal of applying knowledge management at a variety of institutions is the rapid adaptation to the surrounding environment changes in order to enhance the effectiveness and more profitability. As a result, knowledge management indicates to the process of how to create, publish and applying the knowledge in the organization. In other words, the ultimate goal of knowledge management includes knowledge sharing among staffs to enhance the added value of existing knowledge in organizations. One of the objectives of knowledge management is creating communication among individuals who know it so that gradually the individual knowledge turns into organizational knowledge. Another goal of Knowledge management is the growth and promotion of knowledge among staffs. In order to do that, it is necessary to learn information technology and understand its underlying influences in this process. In fact, the ultimate goal of knowledge management is increasing IQ or organization intelligence.

Considering that, the present research studies the relationship between the components of knowledge management and organizational innovation, and based on studies conducted in this field and using the comments of experts of this field of study in defining the research main variables, required indices were identified. According to the hypotheses, a questionnaire was designed to examine the attitude of respondents and then using the results of the questionnaire analysis, this relationship was investigated.

According to the findings of the present investigation, all hypotheses offered are approved. Organization in order to create knowledge, they must consider the tacit knowledge of individuals as a rich and hidden source of new knowledge and a base for organizational knowledge creation. But tacit knowledge cannot be shared or transferred easily to others or. Because it is mainly acquired through experience and cannot easily be expressed with words. So, sharing tacit knowledge among many individuals with different attitudes and motivation is an important step in the realization of knowledge creation. Also setting up a comprehensive system of knowledge management and creating a personal portal (CKMS) and setting up a virtual forum (FORUM) and think tank (Think Tank) for the exchange of experiences among staffs with allocated knowledge code in order to maintain immaterial and material rights and encouraging staffs to this and the establishment and continuing the proposed system can increase knowledge management in organizations and more also leads to organizational innovation and creativity.

Knowledge in the knowledge organizations can be simply transferred and given to all staffs. When staffs access to the organizational knowledge, they can know their environment and make it meaningful. They can get new and better ways for things on the run, work together, make up the absence of knowledge, increase their efficiency, persuade customers, and ultimately gain power of effective competition. Organizations that take actions through research and development, or more informal learning processes in order to produce new

knowledge outperform organizations which are knowledge based. Knowledge management deals with issues such as organizational adaptation, survival, and having strength in encountering to growing environmental changes. In fact, knowledge management tries to be a synergistic combination of information processing, information technology and human creative abilities.

Since the findings of this study confirm the relationship between the components of knowledge management and innovation, to achieve innovation, organization managers are offered to strengthen behaviors and knowledge management procedures in an organization.

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Impact of Financial Liberalization and Governance on the Financial Development in Developing Countries

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Abstract

The study examines the impact of financial liberalization and governance on the financial development in developing countries. The study takes the sample of 48 developing countries and time period from 2000 to 2014. The study uses the domestic credit to private sector (percentage of GDP) as proxy of financial development and for measurement of financial liberalization Chin-Ito index is used. The study finds that financial liberalization alone does not have a significant effect on financial development however when financial liberalization is endogenized with governance then this impact becomes positive and significant. Good governance enhances the positive and significant impact of financial liberalization. Therefore, financial development of the developing countries can be enhanced by the financial liberalization followed by good governance.

Key Words: financial liberalization, Financial Development, JEL Classification: O16, F30

INTRODUCTION

The major contribution in the economic development of the society is of financial sector development and for financial sector development financial liberalization play a major role. The set of instruments like institutions and markets and also including legal and administrative structure allow the transactions to be made through credit extension. All these make financial sector. The process of enhancement in quality, quantity and effectiveness of services of financial intermediaries is financial development. This procedure involves the communication of institutions and activities and is related to growth of the economy. In emerging and developing economies financial sector development is taken as an approach of growth of private sector to reduce poverty and to encourage economic growth.

Financial development is the need of every country in the present era as it is engine to growth and prosperity of the economy. Development of financial sector takes place via reforms in the financial policies and structural framework which is followed by the financial liberalization. But sometimes financial liberalization cannot give fruitful results if institutions are not properly administered. So, good governance also has a major role in the development of the financial sector and implementation of policies. Research in the area of financial sector liberalization and financial development along with the influence of government policies has been conducted internationally. Usually, individual country cases have been discussed by taking time series data; however, limited research has been embarked considering the developing economies as a group. It is evident from the literature that development of financial

sector plays a key role in the growth and development of the economy and it can be achieved via financial liberalization.

Due to the entry of the foreign participants in the local markets increase competition and make that market to abide by the international market rules and regulations. This makes the financial sector more standardized. If an economy will be financially open for international participants of financial sector it will attract more inflow and outflow of capital which will strengthen the financial sector, due to this the local financial markets participants get more chances to access the international markets and being the international participants they can get benefits from the other markets. This will lead to the financial development of the economy by strengthening the financial institutions and by attracting more inflow of foreign direct investment. This financial development will in turn leads towards the economic development, making the economy more prosperous. There are many evidences signifying the importance of financial sector development for economic development. Financial development via aggregation of capital and technological evolution by escalation of saving rates, circulation and aggregation of savings, optimizing capital allocation and encouraging foreign capital inflows promote the economic growth. Countries which have well developed financial systems benefit from constant period of growth and many studies support and confirm this fact. Financial development is considered as the driver for growth. Financial development also calls for formulation of financial policies and regulatory structure. Lack of suitable and satisfactory policies of financial sector can impact dreadfully. Development of financial sector has strong impact on development of economy, both when it is well behaved and functions improperly.

Sometimes, financial openness alone cannot produce highly attractive positive result and in that case role of governance gets vital importance. Better governance policies and their implementation also help to develop and strengthen the financial sector. The policy makers have a number of choices; can impact interest rate, can choose about operation or cessation of financial institutions and also for financial intermediaries they can develop regulatory and administrative structure. It's up to the discretion of policy-makers which financial system they allow to grow and flourish. It is also important to realize that government actions are often complementary to, rather than a substitution for, the market. This does not mean that the government will take over the market. Instead, the government can take necessary actions or steps to make markets more efficient. This is the essence of regulation and good governing policies help the financial sector of the economy to develop by making policies rather than making the market bound to the rules and regulations.

According to the World Bank (2013), states' role in finance will differ by the confidence in country's political system's capability to encourage the public good. It is difficult and complicated to determine the proper role of states in the finance but is important as it is stated as "one size does not fit all when it comes to policy intervention." More scope of government's role in directing financial development can be seen in developing countries. However, if institutional framework is less effective then there will be less development, as a result of this risks of inappropriate interventions will enhance. Innovations in the financial system changes the role of government naturally, as some innovations create the need of new government interventions while some preclude the need of particular policies. Due to this complexity financial sector experts have different opinions regarding the pros and cons of state interference.

This research deals with the role of financial liberalization and governance in the financial development of the developing countries. This study analyses whether financial liberalization

has any impact on financial development; and also analyses how this liberalization impacts the development of financial sector in the absence or presence of the governance.

LITERATURE REVIEW

Hellmann & Murdock (1995) analyzed the role of governance and financial institutions in financial development by the establishment of policies and procedures and by creation of reputational capital. According to the study complete liberalization for developing country is not the appropriate recommended policy. Rather the country should invest more of their resources in building reputational capital and governance mechanism. The study suggests the framework for attaining incentives from the policies of the government and development of the reputational capital. Reinhart & Tokatlidis (2000) examined the impact of financial liberalization and financial reforms on the financial development of the African countries. The findings of the study suggests that overall African countries cannot gain from liberalization as compared to other developing countries and middle income countries which may be due to lack of institutional reforms and financial market perfections. As the gain does not appear in the short term but in the long term it will give benefits to the Africa.

Wyplosz (2001) analyzed the impact of financial liberalization on financial sector especially focusing on exchange markets currency crises than bank crises and analyzes that either financial liberalization is hazardous or beneficial. The study takes the sample size of 27 developing and developed countries and employed autoregressive model of the exchange market pressure index with lags of the financial restriction variables. The study also analyzes that financial liberalization on one side beneficial for the development but if not managed properly can lead to crises. The study concludes that the developing countries can gain more from liberalization than developed countries. Similarly, Arestis, Demetriades, Fattouh & Mouratidis (2002) examined the effect of financial policies on the financial development of developing countries. The Johansen's cointegration technique and Error Correction Model was applied. In some countries it impacts positively while in others it impacts negatively. This variation appears due to the differences in institutional frameworks. Overall findings of the study suggest that the impact of financial policies including financial liberalization is ambiguous and depends on institutional and governing institutions.

There is a need of institutional and regulatory governance reforms before the implementation of financial liberalization (Crotty and Lee, 2005). The study took a sample of 17 emerging economies and sample period ranging from 1973 to 2004. Regulatory governance is taken as dependent and financial liberalization, degree of economic development and level of political risk are taken as independent variable in the study. The study takes "agency independence, accountability to government, legislature and public transparency and integrity" as elements of quality of governance.

Chin & Ito (2006) examine that which factor is necessary for financial development, either financial liberalization or legal and institutional development. This study analyzes the link between financial development, financial liberalization and legal and institutional development. This study takes the panel data of 108 countries which includes less developed economies and emerging economies and time period ranges from 1980 to 2000. The study finds development of general legal and institutional system is important than the finance related legal development. Study also finds that to reap the maximum benefit from openness, trade openness should be preceded by financial liberalization. The study also finds that for development of equity markets, banking system of the country should be well developed.

Kose, Prasad, Rogoff & Wei (2006) provide a way to measure the indirect benefits of financial globalization. The study says that the indirect effects of financial globalization on financial sector development, institutions, governance and macroeconomic stability are more important than any direct benefits which are achieved via capital aggregation or portfolio diversification. Quantity-based measures of integration are used. Dependent variable is growth which indicates the average real per capita GDP growth while independent variables include financial openness, initial income, human capital, investment rate and population growth. The study finds that financial globalization can play an important role in creating a number of benefits which increases long-run growth and welfare in developing countries. Complete opening of the capital account without sufficient essential supporting conditions, policies and governance can hinder the attainment of benefits and expose a country to abrupt stops of capital flows.

Ang & McKibbin (2007) investigate the impacts of financial liberalization on financial development which leads towards the economic development in Malaysia. The paper uses time series data and conduct co-integration and various causality tests for the estimation purpose. This paper uses four trivariate vector autoregressive (VAR) models. Each model includes per capita real GDP, financial depth and saving, investment, real interest rate or trade openness as conditioning variables. The paper use unit roots by using Augmented Dickey-Fuller (ADF) test. The result of the study is concluded as the financial liberalization cannot increase economic growth without a well-behaving and efficient financial system which responds to changing environment.

Greenidge & Moore (2007) the study finds the nexus between financial liberalization and financial development in three countries of Caribbean region that are Barbados, Jamaica and Trinidad and Tobago. The study takes financial development as dependent variable and financial liberalization, real per capita income, real deposit rate and the number of bank branches as independent variables. Due to the small sample size the study applies dynamic ordinary least square (DOLS) technique for the analysis. The study uses different measures for financial development and then applies principle component analysis to get single indicator of it. Owing to pace of implementation of liberalization policies, the study ends with interesting and different results regarding the impact of financial liberalization on financial development in the three countries. Overall findings of the study support the fact that financial liberalization impacts financial development positively.

Naceur, Ghazouani & Omran (2008) analyze the impact of stock market liberalization on the financial development and on the economic development of MENA countries. The study takes the sample of 11 MENA countries for the period of 1979-2005. The study take panel data and uses GMM technique for estimation. The paper takes economic development as dependent variable which is measured as per capita growth of real GDP while stock market liberalization along with macroeconomic reforms is taken as independent variable. "Trade openness, inflation, government consumption to GDP ratio and the black market premium" are considered as macroeconomic reforms. The study analyzes that impact of stock market liberalization on financial and economic development in short term is negative while in long term it is positive and liberalization should be started first for domestic economy then it should be opened for foreign markets.

Baltagi, Demetriades & Law (2009) analyze whether trade and financial openness either individually or collectively can leads toward financial development with global pace. The study uses Dynamic Panel GMM Estimation by fixed effects. The study takes financial development as dependent variable while lagged dependent variable, per capita income, trade openness, financial openness as independent variables. Financial development is proxied by private

credit and stock market capitalization. The findings of the study express that relatively closed economies can get benefit most from opening up their trade and/or capital accounts for international markets. Khalaf & Sanhita (2009) examines the effect of financial activities i.e. financial repression and financial liberalization on financial development of Iraq. The study used the “Autoregressive Distributed Lag (ARDL) model”. The paper found that neither financial repression nor financial openness could impact positively on the financial development of Iraq. The paper analyzed that for positive impact on financial development better institutional reforms, better political environment and macroeconomic variables stability should be maintained in Iraq, this will help in positive impact of financial liberalization on financial development.

According to Mishkin (2009), financial globalization can be helpful for financial development and economic growth and for eradication of poverty in emerging market countries. Liberalization reduces the power of government and entrenched private special interests and strengthen the institutional reforms to make the financial system strong and work better. But if financial globalization is not managed properly can cause financial crises which leads to economic hardship. The paper compares the different ages of globalization such as the first age of globalization (1870-1914) which ends up with “great reversal” and the second stage of globalization (1960-Present) and analyzed that in these ages globalizers have gained. Karikari (2010) investigated factors that determine financial development in SSA countries by focusing on the role of governance and financial liberalization. According to the results, financial liberalization itself does not improve financial development in SSA. Improved financial liberalization actually resulted in lower financial development but on the other hand, the impact of governance on financial development has improved over time which leads to financial development

Cooray (2011) studied the impact of government size and quality on size and efficiency of the financial sector, by taking a sample size of 71 economies. It was found that government sector size and quality both are important for financial sector efficiency however government quality is more important than the size of the government sector for financial sector development. The study analyzes that good governance is a precondition of financial development. Ahmed (2013) analyzed the role of financial liberalization in enhancing financial deepening and financial development leading to economic growth in Sub-Saharan African countries (SSA). The paper takes panel data of 21 Sub-Saharan African countries over the period of 1981–2009 and applies the GMM estimator. The study found that financial liberalization impact positively on financial deepening and resource mobilization in SSA region.

THEORETICAL BACKGROUND

The financial oppression which dominated in the developing and transforming economies in 1970s and 1980s showed an amalgamation of the state-driven development, patriotism, politics and bribery. The financial system was employed as tool of government where governments gave loan at lesser interest rates, used tools of monetary policy and government-assured foreign loans to confirm funding for public firms and for their own and left were given to the sectors they prefer. For apportionment of funds importance of State banks was necessitated. Bank administrators started concentrated to fulfill the complex necessities of funds allocated in spite of following prudential regulations. Lower Interest rates were given to depositors to maintain the low costs of loans. Sometimes this was considered as an important tool to enhance the quality of distribution of income. Thus oppressed finance was considered as system of inherent tax and subsidy; with the help of this, states transmit resources from creditor to those state favored debtors. Lower interest rates create high demand for loans

which made it mandatory for government to distribute the funds. Measures for controlling capital were necessitated not only to protect national savings but also to control capital sweeping due to lower interest rate and macroeconomic instability, and to get high returns from inflation tax. Capital controls were actually a form of tax imposed on payers who are not willing to pay tax and boost barberry.

The term financial liberalization covers a number of measures, such as the autonomy of the Central Bank from the government; means full liberty of capital to move into and out of the economy. Freedom of finance allows the full convertibility of the currency and leads to end of government-imposed differential interest rates; and the removal of restrictions of banks' ownership leading to de-nationalization, full freedom for foreign ownership and so on. These measures not necessarily need to be implied in their optimal such as The Narasimham Committee in India did not requires for a entire denationalization of banks; the committee recommended that the government, the Indian private sector and the foreigners each should share one-third equity in the currently-nationalized banks.

Every economy desires to develop financially and economically to participate in the race of the growth and development that's why financial development is the need of every country. Development of financial sector also includes/entails formulation of booming financial policies and regulatory structure. Lack of adequate financial sector policies could have catastrophic fallout. Financial development has serious impacts on economic development--both when it functions well or malfunctions. Bearing in mind the financial-economic development nexus alongwith the realization of financial repression's cost increased responsiveness for the need of financial liberalization. Economic think tanks and world financial bodies such as World Bank and IMF recommend for policies of financial liberalization. Financial liberalization means relaxation in financial industry's regulations. Financial liberalization appears when restrictions of financial markets and financial institutions are eradicated or when financial innovations such as subprime mortgage loans are imported to the financial markets. There is rapidly growing literature showing and supporting the fact that financial liberalization increases the financial development, impose disciplines on macroeconomic policies, breed competence gains for domestic firms by divulging them to competition from foreign entrant, and set free forces that result in better government and corporate governance(Kose et al., 2006).According to Isard (2005) in the last few decades a greater change in the global financial system appears due to movement of private capital from industrial countries to developing countries. Due to this flow of capital across border the growth of world GDP has been increased too much either we measure it in gross or net terms. This flow of capital has been outpaced faster than the GDP of developing countries. Such as increase in domestic financial activities, international financial activities also increased which leads towards the economic growth in long run but along with this economies are also vulnerable to financial crisis and risks associated with the increasing financial obligations. The reduction or removal of the restrictions on financial activities allows the investor to choose more effective destination for his investment. This efficient reallocation of funds will take place to most productive opportunities, which will leads to productive growth of financial and economic systems which in turn will benefits the whole society (Gehring, 2014).

Financial liberalization allows concentration of the capital market, which is an obligatory provision for economic progress as cited by Shaw. Shaw said that financial oppression has many unconstructive results. In comparison to this financial liberalization has constructive impact on growth, thanking to most favorable distribution of funds with a saving price which shows its scarceness and the union of the domestic financial structure. Besides this also

reduces unemployment, propose a superior financial credit and the opening the way for overseas capital.

Financial liberalization, governance and financial development are linked with each other and influence each other either positively or negatively depending upon circumstances. Governance means the traditions and institutions by which authority in a country is exercised. The way to exercise the power through a country's political, economic and social institutions to manage a country's affairs at all levels is known as governance. It consists of processes, mechanisms and institutions, by which citizens coherent their interests, exert their legal rights and reconcile their differences. Basic governance indicators are: government effectiveness, rule of law, political instability and violence, voice and accountability and regulatory burden. Whereas, good governance along with other fundamental aspects is participatory, accountable and transparent. It is also efficient and unbiased and it encourages the rule of law. These are the institutions which make the financial sector developed, prosperous and strong. The well functioning or malfunctioning of these institutions have a strong impact on the financial sector and its development which in turn impact on the development of the economy. These institutions are actually the governing bodies and departments which make rules, laws, implement these rules and laws in any specific sectors.

Financial institutions itself are part of governance which regulate the financial sectors by its rules and regulation and play its role in the strengthening of the financial sector. If institutions will be strong and powerful to implement the policies and procedures then these institutions and governing bodies can control the financial sector, its development and become helpful, participative and controlling authorities in economies' economic situations. A strong financial system allows diversification of risk and effective capital distribution. According to this approach, financial liberalization impacts growth/development through indirect channels and these benefits can be detected in long periods. So, benefits of financial liberalization can be more compelling in economies with more robust institutions and good macroeconomic policies. Conventional wisdom based upon theory of market efficiency that free capital movement enhances the global distribution of savings and help resources to move in their most fruitful uses; hence escalating economic growth especially within countries having low capital and fewer saving, but actual studies did not found this. The defender of the financial liberalization says that to reap the benefits of financial liberalization, some preconditions should be developed which includes developed and well regulated financial system, good governance, sound macroeconomic policies etc but there is no clear empirical support for this argument.

Kose (2006) supports the opinion that financial integration acts as vehicle for many benefits including financial market development, institutional development, better governance and macroeconomic discipline. It is necessary to have a well developed, well supervised financial sector, good macroeconomic policies which prevent capital flows from making a country more susceptible to abrupt stops or reversal flows. Better macroeconomic outcomes of financial integration can be achieved when certain threshold condition should meet. These preconditions are trade integration, sound macroeconomic policies i.e monetary and fiscal, depth and sophistication of financial markets, quality of financial sector regulations, supervision, transparency and good governance etc.

Financial system is very important for development of the economy. Researchers believe that absence of developed financial system hamper the economic development. Policy makers should formulate the policies which promote and reinforce the subsistence of well functioning

financial system. On one side financial liberalization is important and beneficial for financial development; on the other side due to poor management and lack of good governance it can have reverse effects. According to Eichengreen (2003) due to widespread prevalence of the information asymmetries in the financial system then financial liberalization will not improve the welfare of the economy. In environment of financial fragility, financial liberalization may not be a universal remedy and to avoid severe drawbacks, vigilant approaches are required

Financial liberalization and globalization enhance the financial intermediary's stability which can get funds abroad and diversify their risks and get saved from local shocks. Globalization of financial markets offers more competition and alternatives of finance for local firms which allow them to flourish well. Due to this reason financial system become developed and contributes to development of the economy. For financial sector development, formulation of financial policies and administrative framework is necessary. Moreover development of financial sector involves the formulation of better financial policies and best administrative structure. Devastating results can appear due to lack of satisfactory financial policies. Even a well behaved or erroneous financial system has serious impacts on economic development of the economy.

The main limiting factor of the study is that it takes only 48 developing countries as the data of under consideration variables' of all developing countries is not available.

DATA AND METHODOLOGY

The main purpose of the study is to analyze the impact of financial liberalization on the financial development of any economy in the absence or presence of the governance. This study uses domestic credit to private sector percentage of GDP for financial development. Domestic credit to private sector is defined as financial resources given to private sector that are in the form of loans, trade credits, other accounts receivable and purchases of non-equity securities that create a claim for repayment. The Chinn-Ito index (2006) is used to measurement financial liberalization. This index is based on binary dummy variables which indicate the tabulation of restriction on financial activities across border which are Reported in the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER). Governance is measured as average of six World Governance Indicators which include government effectiveness, regulatory quality, political stability and absence of violence, rule of law and voice and accountability. The control variables include legal origin, Inflation and real interest rate. The legal origin of the country means the origins of the country's law; means on which origin legal system of the country based. There are five categories of legal origin i.e. civil law, common law, Muslim law, customary law and mixed law. The study uses two systems; civil law and mixed law. Since, the sample of developing countries selected for the current research is using these two categories of legal origin. Inflation is measured by the annual growth rate of the GDP deflator. Real interest rate is the lending interest rate which is adjusted for inflation. The terms and conditions regarding lending rates vary from country to country; however, limiting their comparability. The study uses the data of real interest rate retrieved from data bank of World Bank.

This study uses the unbalanced panel data from secondary sources for the developing countries covering the time period from 2000-2013 and 48 countries.

The data for financial development is taken from Global Financial Development and World Bank while the data for the financial liberalization is collected from the Chinn-Ito Index (2013). The data for governance has been collected from the World Governance Indicators. Data for inflation and interest rate is collected from the World Development Indicators. The data for

origin of legal system is collected from the data compiled by the University of Ottawa's World Legal System Research Group retrieved from (<http://www.juriglobe.ca/eng/sys-juri/class-poli/droit-civil.php>).

The Model

The study measures the impact of financial liberalization and governance on the financial development of the economy both individually and collectively. The study first analyzes the individual impact of financial liberalization on financial development without taking into account governance; then study finds this impact in the presence of governance. The study takes the following functional forms.

$$FD = f (FL, GOV, INF, INT, \text{ and } LGO) \quad \dots\dots\dots (1)$$

$$FL = f (GOV) \quad \dots\dots\dots (2)$$

According to functional form (1) financial development is the function of financial liberalization, governance, inflation, interest rate and legal origin. According to this functional form governance is directly influencing the financial development. While second functional form states that financial liberalization itself is the function of governance which means that governance is not only directly influencing the financial liberalization but on the other hand indirectly influencing the financial development of the economy via financial liberalization.

The study first tests only the first functional form in which governance is taken as the independent variable to see the impact of governance directly on the financial development of the economy in the presence of financial liberalization. The equation is estimated through regression analysis. The study first regress the equation without governance then study takes the governance as separate independent variable on the right hand side of the equation. Governance is taken as separate independent variable in the study to find its direct impact on financial development. Lastly, study incorporates the second functional form (2) by capturing the endogeneity of financial liberalization whereby governance acting as an instrumental variable. The econometric techniques employed by the present study are explained in the following sub-sections.

The study uses the dummy variables to measure the legal origin. Legal origins are categorized into different categories but in this study only two categories of legal origin are used that are civil and mixed legal origin according to the data set used. The study takes the civil law as the benchmark and assigns the value of 1 to it and 0 otherwise.

Estimation Techniques

If regressors are not correlated with error term then the pooled OLS estimator is clearly consistent. For a given individual one expect considerable correlation in over time. This may lead to overstatement of the estimator precision. Depending upon the heteroscedasticity and correlation structure assumed for the errors and the panel structure either it is short or long, many corrections are possible. Pool OLS regression leads to an inconsistent estimator, if the individual effect is correlated with the regression.

An important assumption of the OLS regression model is that all the error terms should have the same variance. When this assumption is violated then there appears the problem of heteroscedasticity. Due to heteroscedasticity, unbiasedness and consistency properties of OLS estimators are not disturbed but these estimators does no longer remain best, linear, unbiased estimators. The Breusch-Pagan Test (1979) is used to test the heteroscedasticity.

The fixed effects model allows for unobserved individual heterogeneity that can be correlated with regressors. The estimated parameters are panel-specific intercepts and therefore permit the conditional mean of the dependent variable to fluctuate across panels. The linear fixed effects estimator is consistent, even if the regressors are correlated with the fixed effects. Unlike the pooled OLS, the within estimator is an estimator which make use of the special feature of panel data. The modified Wald test is used to test the groupwise heteroscedasticity in fixed effect regression model. Its null hypothesis is constant variance for all cross sections/individuals. The Wooldridge Test (2002) is used to identify the presence or absence of autocorrelation in panel data.

PCSEs account for heteroscedasticity and cross-sectional correlation. This estimator is commonly used while working with time-series cross-sectional (TSCS) data. Panel corrected standard errors account for the contemporaneous correlation across the units and heteroscedasticity's deviations from the spherical errors and allow for the improved and better results from linear models estimated from TSCS data. The PCSE covariance shows some similarity with the heteroscedasticity consistent (HC) estimators but the estimators other than the PCSE do not explicitly incorporate the known TSCS structure of the data. This leads to important differences in implementation.

In some single equation models single dependent variable is influenced by single independent variable, that's why cause and effect relationship move from independent to dependent variables. Such a unidirectional relationship is not always meaningful in many other situations where not only dependent variable is influenced by independent variables rather some independent variables are also determined by the dependent variables. Such a two way relationship is called simultaneous equation model. In simultaneous equations to calculate the parameters of one equation, one has to take into account the information provided by other equations. When some regressors are correlated with error term means, they are termed as endogenous. The process of correcting this problem of endogeneity involves search for such instruments which are correlated with the endogenous regressors but not correlated with the error term. For this purpose, the two-stage least squares (2sls) can be applied. This instrument should fulfill both conditions that it should be uncorrelated with error term but correlated with the endogenous variable.

Estimation of Single equation Model (With and Without Governance)

In Model 1 financial development is regressed upon financial liberalization, without taking into account the governance indicator. Following is the equation without the impact of governance.

$$\text{Model 1: } FD_{it} = \alpha_1 i + \alpha_2 FL_{it} + \alpha_3 INF_{it} + \alpha_4 INT_{it} + \alpha_5 LGO_{it} + \epsilon_{1it} \dots \dots \dots (3).$$

In Model 2 financial developments is regressed upon financial liberalization in presence of governance. Here in model 2 of the study, governance is taken as an independent variable; to study its effect on the financial development.

$$\text{Model 2: } FD_{it} = \beta_1 i + \beta_2 FL_{it} + \beta_3 GOV_{it} + \beta_4 INF_{it} + \beta_5 INT_{it} + \beta_6 LGO_{1it} + \epsilon_{2it} \dots \dots \dots (4)$$

Where FD is the financial development measured by domestic credit to private sector, FL is financial liberalization measured through Chinn-Ito index, GOV is the governance, INF is inflation, INT is interest rate and LGO is the dummy variable. The subscript i and t refers to the cross-sections and time period.

Estimation of Model using Two-Stage Least Square (2SLS)

Following is the equations for the 2SLS model of the study where governance is used as endogenous variable effecting financial liberalization. The Model 3 is given as below:

$$FLit = \alpha_{10} + \beta_{11}Govit + \epsilon_{1it} \dots\dots\dots (5)$$

$$FDit = \alpha_{20} + \beta_{21}FLit + \beta_{22}INFit + \beta_{23}INTit + \beta_{24}LGO1it + \epsilon_{2it} \dots\dots\dots (6)$$

Substitute eq (5) into eq (6)

$$FDit = \alpha_{20} + \beta_{21}(\alpha_{10} + \beta_{11}Govit + \epsilon_{1it}) + \beta_{22}INFit + \beta_{23}INTit + \beta_{24}LGO1it + \epsilon_{2it} \dots\dots\dots (7)$$

By combining error terms $\beta_{21}\epsilon_{1it} + \epsilon_{2it} = \mu_{it}$

Model 3: $FDit = \alpha_{20} + \beta_{21}\alpha_{10} + \beta_{21}\beta_{11}Govit + \beta_{22}INFit + \beta_{23}INTit + \beta_{24}LGO1it + \mu_{it} \dots (8)$

Where FD is the financial development measured by domestic credit to private sector, FL is financial liberalization measured through Chinn-Ito index, GOV is the governance, INF is inflation, INT is interest rate and LGO is the dummy variable. The subscript i and t refers to the cross-sections and time period.

Some of the regressors, being endogenous in nature, are likely to be correlated with the disturbance or error term then the simultaneity problem arises. Therefore, simultaneity test is essential. For this purpose, Durbin Wu-Hausman Specification Test as specified by Hausman and Taylor (1981) is used. This is the test to check the consistency of an estimator when compared to a consistent alternative but less efficient estimator.

Table 1 shows the results of model 1 illustrating the impact of financial liberalization on financial development, while controlling for the variables such as inflation ,interest rate and legal origin, by using the Pooled OLS, Fixed effects and Panel corrected standard error techniques respectively. The results of the table shows that first of all pooled OLS is applied on the panel data of 48 countries. The summary statistics of this pooled regression indicate the negative impact of financial liberalization on the financial development. To check the nature of the data that either it is homoscedastic or hetroscedastic Breusch–Pagan (1979) heteroscedasticity test is applied. The result of the test shows the high value of chi-square which shows the presence of heteroscedasticity in the data; hence the null hypothesis of constant variance is rejected.

Due to the presence of heteroscedasticity, the study has to move towards the next technique of panel data that is fixed effects. The results of the fixed effects also indicate the negative impact of financial liberalization on financial development. For diagnostic purposes study apply heteroscedasticity test and autocorrelation test to conform the presence or absence of heteroscedasticity and autocorrelation in the data. For groupwise heteroscedasticity study apply Modified Wald test and for autocorrelation Wooldridge (2002) test is applied. The result statistics of the Wald test indicate the presence of the heteroscedasticity in the panel data, leading towards rejection of null hypothesis of constant variance. The result of the Wooldridge (2002) autocorrelation test leads to rejection of null hypothesis that is “no autocorrelation”, which means that autocorrelation is present in the model. After the detection of the heteroscedasticity and autocorrelation in panel data, the study moves further towards the panel corrected standard error (PCSE) technique to resolve these problems of autocorrelation and heteroscedasticity.

Table 1: Relationship of Financial Liberalization and Financial Development (Model 1)

Variable	Estimation Technique		
	Pool OLS	Fixed Effect	PCSE
FL	-0.817 (0.23)	2.396* (0.06)	0.357 (0.48)
INT	-0.949*** (0.00)	-0.376*** (0.00)	-0.268*** (0.00)
INF	-0.543*** (0.00)	-0.224*** (0.001)	-0.252*** (0.00)
LGO	3.702* (0.08)		5.524*** (0.00)
Intercept	39.563*** (0.00)	32.168*** (0.00)	24.368*** (0.00)
Diagnostics	Breusch-Pagan Test (Heteroscedasticity is present)	Wald Test (Heteroscedasticity is present) Wooldridge Test (Autocorrelation is present)	No Heteroscedasticity No Autocorrelation

Note: *indicates that coefficients are statistically significant at 1% level of confidence**

****indicates that coefficients are statistically significant at 5% level of confidence**

***indicates that coefficients are statistically significant at 10% level of confidence**

Third column of Table 1 indicates the results of the Panel Corrected Standard Error technique. The summary statistics of this technique indicate that most of the variables for the model 1 are statistically significant but the variable of financial liberalization is statistically insignificant. The results of this technique indicate that coefficient of financial liberalization is statistically insignificant but shows the positive impact on financial development. As the statistics shows that one unit increase in financial liberalization causes 0.357 units increase in the financial development and vice versa. The relationship of financial liberalization and financial development is ambiguous. Although much literature supports the positive impact of financial liberalization on financial development and growth but there is also much literature which contradict this opinion of positive impact. As many studies spill ink over the direct relation of financial liberalization and financial development such as, Fry (1995) , Klein & Olivie (1998), Arestis et al.,(2002), Ranciere et al.,(2006), Ozdemir & Erbil (2008), Baltagi et al.(2009) support the positive impact. In a paper researcher argues that financial liberalization leads to improvement in the financial sector growth which inturn increase the growth of the economy. Fry (1995) and Arestis et al.,(2002) support the fact that in financial repression financial fragility increases which is a heavy tax on the development of financial market and economy growth, as cited by the Ahmed (2013). Klein & Olivie (1998) examines that financial liberalization has a positive impact on financial sector deepening and development. Bumann (2013) support the positive and direct relation of financial liberalization on the growth and development of the financial sector and economy. Kose et al. (2010) also finds the positive and favorable impact of financial liberalization which is conditional upon macroeconomic policies. All these studies are in favor of positive relation of financial liberalization and financial development. The results of the current study also show the positive impact of financial liberalization and financial development; however this impact is highly insignificant. This

insignificance may be occurred due to financial fragility, information asymmetry, reduction of relationship lending etc. all these can be the reasons of insignificant nature of the relation of financial liberalization and financial development in developing countries. The coefficient of real interest rate is statistically significant and indicates the negative relationship of interest rate and financial development. As result shows that one unit increase in the interest rate causes 0.268 unit decrease in the financial development and vice versa. This relationship of real interest rate and financial development is also ambiguous as many theories support the positive impact of interest rate on financial development while much other literature contradict this and allude the negative impact of interest rate. De Gregorio & Guidotti (1993) claim that very low interest rate leads to financial disintermediation and due to this growth reduces. While on the other hand, very high interest rate does not improve efficiency of investment rather it moves the way to lack of credibility of economic policies or various forms of country risks cause lower investment as well as concentration in highly risky projects. As Udoh & Ogbuagu (2012) referred the work of Warman and Thirwall (1994) who criticize the interest rate liberalization hypothesis and support the fact that interest rate negatively impacts the investments and inturn the financial sector development. They argue that opportunity cost of consumption increases by the increase in interest rate after interest rate liberalization, due to this household will substitute some part of their consumption to savings and savings will increase. On the other hand wealth of the households increase due to increase in savings, this leads to more consumption pattern. This ambiguous substitution effect will produce counter effect and finally leading to overall negative impact on savings. This negative impact of interest rate will eventually impact the financial development. Gupta (1984) also argues the negative relation of interest rate, savings and development. Nonfinancial corporations enter the financial sector to earn high returns by financial speculative activities and lenders feel compelled to finance them for such speculative activities because of fear of loss of market share (Minsky, 1986). These speculations increase the risk and due to this financial development impedes. Arestis & Demetriades (1997) also support the opinion that countries such as Latin America faced the devastating and destabilizing effects of financial liberalization as financial liberalization unleashed the demand for credit by households by interest rate fluctuations. This high real interest rate did not improve the savings and investment; it just increases foreign savings which are external debts, leading the countries to vulnerable situation. Singh (1997) is also one of the proponents who argue the negative relation of interest rate and savings and financial development and claims that rapid growth of stock markets warns about the possible speculative pressure that may be generated.

The results indicates that coefficient of inflation is statistically significant and indicates that the relationship of inflation and financial development is inverse in nature. As summary statistics depicts that one unit increase in inflation causes 0.252 units decrease in the financial development and vice versa. As inflation is linked with savings as it is the base of financial intermediaries. Rousseau & Wachtel (2002) support the fact that high inflation rate reduces the financial development. Boyd et al. (2000) also examined the relation of inflation and financial market activities that inflation rate impacts adversely on credit market activities and have negative effects on the financial sector performance. Boyd et al. (2000) provide the evidence that inflation has significant important negative impact on development of banking sector and equity market activity. According to Karikari (2010) inflation is expected to have negative impact on financial development.

The coefficient of legal origin/dummy, i.e. civil law is statistically significant and indicates that civil law is working better than the mixed law. The result indicates that civil law is 5.524 times/units more efficient and better than the mixed law. The coefficient of the intercept is also

statistically significant and indicates the positive association with the dependent variable financial development. The intercept represents the other variables which can affect the financial development. The results indicates that one unit change in intercept value causes 24.368 units change in financial development and that change is directly related with the nature of change in intercept. This means that other variables directly affect the financial development. If intercept increases by one unit then financial development will also increases by 24.368 units and vice versa.

As governance plays a significant role in the financial sector development as proved by many studies. So in this study also analyzed the impact of governance on financial development. Model 2 depicts the relationship of financial liberalization and governance with financial development. In this model governance is also taken as independent variable along with financial liberalization. The variables used in the model 2 are examined, analyzed and the results are discussed below in table 2.

Table 2 gives the glimpse of summary statistics of results of model 2 which illustrates the impact of financial liberalization and governance on financial development, while controlling for the variables such as inflation, interest rate and legal origin, by using the Pooled OLS, Fixed effects and Panel corrected standard error techniques respectively.

Table 2: Relationship of Financial Liberalization, Governance and Financial Development (Model 2)

Variable	Estimation Technique		
	Pool OLS	Fixed effect	PCSE
FL	-1.925*** (0.002)	2.343* (0.08)	0.514 (0.23)
GOV	26.492*** (0.00)	10.332*** (0.002)	14.074*** (0.00)
INT	-0.817*** (0.00)	-0.259*** (0.004)	-0.251*** (0.00)
INF	-0.318*** (0.003)	-0.155** (0.02)	-0.197*** (0.00)
LGO	7.46*** (0.00)		3.982** (0.03)
Intercept	51.070*** (0.00)	36.976*** (0.00)	35.305*** (0.00)
Diagnostics	Breusch-Pagan Test (Heteroscedasticity is present)	Wald Test (Heteroscedasticity is present) Wooldridge Test (Autocorrelation is present)	No Heteroscedasticity No Autocorrelation

Note *indicates that coefficients are statistically significant at 1% level of confidence**

****indicates that coefficients are statistically significant at 5% level of confidence**

***indicates that coefficients are statistically significant at 10% level of confidence**

The summary statistics of this pool OLS regression signify that all variables of this regression are statistically significant and indicate the inverse relation of financial liberalization and

financial development. To check either data is homoscedastic or heteroscedastic study applies Breusch–Pagan/ Cook-Weisberg heteroscedasticity test. The result of the test shows the large value of chi-square which signals the presence of heteroscedasticity in the data; hence the null hypothesis of constant variance means homoscedasticity is rejected. Due to heteroscedastic nature of data, the study steps forward towards the next technique of panel data that is fixed effects.

The results of the fixed effects also point out the negative impact of financial liberalization on financial development. For diagnostic purposes study applies heteroscedasticity test to conform the nature of the data either it is homoscedastic or heteroscedastic and autocorrelation test to check autocorrelation in the data. To test group-wise heteroscedasticity study apply Modified Wald test and to test autocorrelation Wooldridge (2002) test is applied by the study. The summary statistics of the Wald test signify the presence of the heteroscedasticity in the panel data, leading towards rejection of null hypothesis of constant variance, means data is heteroscedastic not homoscedastic. The result of the Wooldridge (2002) autocorrelation test leads to rejection of null hypothesis that is “no autocorrelation” means autocorrelation is present in the model. After finding of the heteroscedasticity and autocorrelation in panel data, the study proceeds towards the next technique that is panel corrected standard error (PCSE), to wipe out these problems of autocorrelation and heteroscedasticity from the data.

Third column of table 2 shows the results of the Panel Corrected Standard Error technique. The results of this technique indicate that all variables for the model 2 are statistically significant. The summary statistics of this technique shows that coefficient of financial liberalization is statistically insignificant but reveals the direct and positive relation of financial liberalization and financial development. As the result depicts that one unit increase in financial liberalization causes 0.5141.925 units increase in the financial development and vice versa. As the relation of financial liberalization and financial development is ambiguous, financial liberalization can impact positively and negatively also. Both these negative and positive aspects of this relation are supported by the studies. Many studies such as Fry (1995) , Klein & Olivie (1998), Arestis et al.,(2002), Ranciere et al.,(2006), Ozdemir & Erbil (2008) supporting the positive relation of financial liberalization. Ahmed (2012) and Bumann et al. (2013) also advocate the work of others regarding the positive impact of financial liberalization on financial development. The results of this study are also inline with the studies supporting the inverse relation of financial liberalization and financial development.

Governance plays a vital role in the development of the financial sectors as in some economies financial liberalization alone cannot benefit the economy positively. Either governance is well functioning or it is malfunctioning impacts strongly on the financial sector and its development. Many studies support the fact that governance plays an important role in the development. According to Bashar and Khan (2007) developing countries cannot reap the benefits of financial liberalization until and unless preconditions of basic infrastructure and good governance are fulfilled. Karikari (2010) supports the role of governance and states that financial liberalization can impact positively on financial development and for this good governance structure and institutional development is required. Ahmed (2012) argues that institutional development and proper functioning institutions of governance are preconditions for getting the positive benefits of financial liberalization. The results of this study are also inline with the studies supporting the positive role of governance on the financial development. The results indicate that coefficient of governance is statistically significant and indicates the direct relationship of governance and financial development. As result depicts that one unit increase in the governance causes 14.074 unit increase in the financial

development and vice versa. As the results depict that governance not only itself enhance financial development but also leads the financial liberalization to improved financial development.

The coefficient of real interest rate shows that it is statistically significant and shows the inverse relationship of interest rate and financial development. As the summary statistics depicts that when interest rate increases by one unit causes 0.251 units decrease in the financial development and vice versa. The ambiguous relation of real interest rate, savings and financial development is eminent. Some researchers support the positive relation while many others are in favor of inverse relation of them. Hellman et al., (2000) argues that due to financial liberalization franchise value of banks fall down which leads towards financial disturbance and make them to face high risk for high profit earning purposes under pressure of low interest rate margin. Due to this pressure of interest rates, banks go for gambling strategies and pay more attention to profit than risks. This is disastrous for the financial sector.

The summary statistics of the inflation shows that coefficient of inflation is statistically significant and signify that the relationship of inflation and financial development is inverse in nature. As summary statistics depicts that when inflation increases by one unit causes 0.197 units decrease in the financial development and vice versa. Many studies support this inverse relation of financial development and inflation. The same inverse relation of inflation is advocated by the Boyd, Levine & Smith (2001).

The statistically significant coefficient of dummy variable indicates the efficiency of civil law over the mixed system. As the results indicate that civil law is performing better than the mixed law, civil law is 3.982 times/units more efficient than mixed law. The result of intercept shows that the coefficient of the intercept is also statistically significant and indicates the positive association with the financial development. The results indicates that when intercept changes by one unit causes 35.305 units change in financial development and that change is directly related with the nature of change in intercept. This means that if independent variables are kept zero then one unit increase in variables other than the independent variables will cause financial development to increase by 35.305 units and vice versa.

The model 3 illustrates the relationship of financial liberalization and financial development, where governance is taken as instrument of financial liberalization. This model is analyzed by using 2SLS or instrumental variable technique where governance is being endogenized in place of financial liberalization. Variables of this model 3 are analyzed, examined and results of this analysis are discussed below.

Table 3 illuminate the results of model 3 depicting the impact of financial liberalization on financial development, while controlling for the variables such as inflation, interest rate and legal origin, by using 2SLS technique where governance is taken as instrumental variable.

Here in this model governance is not taken as independent variable as taken in model 2, rather it is taken as an instrument of financial liberalization. The summary statistics of this technique are shown in the table 5.3. As the result shows that all the variable of this model are statistically significant. The coefficient of financial liberalization depicts the direct relation of financial liberalization and financial development means there is positive relation between both of these variables. By the increase or decrease of financial liberalization, financial development also respectively increases or decreases.

Table 3: Relationship of Financial Liberalization and Financial Development, using 2SLS/IV Technique (Model 3): Governance as endogenous variable

Variable	Coefficients
FL	69.757** (0.02)
INT	-3.465*** (0.005)
INF	-1.632** (0.02)
LGO	-35.125* (0.07)
Intercept	74.956*** (0.00)
Diagnostics	Durbin Wu-Hausman Test (Variables are endogenous)

Note: *indicates that coefficients are statistically significant at 1% level of confidence, **indicates that coefficients are statistically significant at 5% level of confidence, *indicates that coefficients are statistically significant at 10% level of confidence**

Here in this model governance is not taken as independent variable as taken in model 2, rather it is taken as an instrument of financial liberalization. The summary statistics of this technique are shown in the table 5.3. As the result shows that all the variable of this model are statistically significant. The coefficient of financial liberalization depicts the direct relation of financial liberalization and financial development means there is positive relation between both of these variables. By the increase or decrease of financial liberalization, financial development also respectively increases or decreases.

The results depict that financial development increases by a greater value when governance is endogenized in the model. If governance is used as instrument of financial liberalization, it impact positively on the financial development. This change in the relation appears due to governance and institutional development as it is already provided by many studies that due to good governance financial development increases. So governance plays a vital role in financial development either directly or indirectly. As Bashar and Khan (2007) and Karikari (2010) support the positive impact of governance on financial liberalization and financial development. By the increase of one unit of financial liberalization, financial development also increases by the 69.757 units and by one unit decrease in financial liberalization, financial development also decreases by the 69.757 units.

The results suggest that due to governance and institutional development, relation of financial liberalization and financial development has been changed and financial liberalization is impacting positively on financial development. The results of real interest rate depict that interest rate is negatively associated with the financial development, as when interest rate increase financial development decreases and vice versa. According to result statistics of interest rate, by one unit increase in interest rate financial development decreases by 3.465 units and vice versa. Udoh & Ogbuagu (2012) and De Gregorio and Guidotti (1993), Warman and Thirwall (1994) and Hellman et al. (2001) support the opinions that real interest rate is inversely related with financial development. Similarly results of inflation also show that financial development decreases by the 1.632 units with one unit increase in the inflation and vice versa. Boyd et al. (2000) and Karikari (2010) are in favor of inverse relation of inflation

and financial development. These studies support the negative relation of inflation and financial development.

The study uses two systems of the legal origin; civil and mixed systems according to the nature of the data. The results of legal origin indicate that civil law is less efficient than the mixed system. The results depict that civil law is 35.125 times less efficient than the mixed origin. This result is in accordance with the theories which suggest that mixed law is most efficient to accept changes in law, regulation and changes in policies. Mixed system is more adaptive to the change than the civil law (Karikari, 2010).

Intercept is also statistically significant and signify direct relation with financial development. The coefficient of intercept indicates that if dependent variables are kept zero then by one unit change in intercept, financial development will change by 74.956 units in the same direction as intercept changes. If intercept increases, financial development will also move in the same direction and will increase but if intercept decreases, financial development will also decrease. To test either variables are endogenized or not, Durbin, Wu-Hausmann test also named as Hausmann specification test is applied on it. The result of the test shows that value of chi-square is significant which leads to rejection of null hypothesis of exogenous variables. This indicates that variables are endogenous. To test the presence of heteroscedasticity in the data, after 2SLS has been applied, several tests are applied.

In 2SLS after applying Hausmann specification test variables appear to be endogenous, the study apply many tests for heteroscedasticity in presence of instrumental variables, as the data appears to be heteroscedastic in nature when pool OLS and Fixed effects were applied. To test either data is still heteroscedastic or not study applies many tests for it such as Pagan-Hall general test statistic, Pagan-Hall test w/assumed normality, Breusch-Pagan/Godfrey/Cook-Weisberg etc. The test statistics of Pagan-Hall general test indicates that value of chi-square is 7.729 and its p-value is 0.102 which appear statistically insignificant. This insignificance of chi-square leads to acceptance of null hypothesis that is "disturbance is homoscedastic". This means now data is homoscedastic, there is no heteroscedasticity in the data.

Table 4: Heteroscedasticity tests in presence of instrumental variable (IV)

IV heteroscedasticity tests using levels of IVs only			
Null Hypothesis (H ₀) Disturbance is homoscedastic			
Tests	Statistics	Notations	P-value
Pagan-Hall general test statistic	7.729	$\chi^2(4)$	0.102
Pagan-Hall test w/assumed normality	2.717	$\chi^2(4)$	0.606
White/Koenker nR2 test statistic	7.453	$\chi^2(4)$	0.113
Breusch-Pagan/Godfrey/Cook-Weisberg	3.407	$\chi^2(4)$	0.492

Source: Author's own calculation

CONCLUSIONS

This empirical study finds the impact of financial liberalization and governance on the financial development of the developing countries by utilizing panel data of forty eight developing countries for time period ranging from 2000 to 2013 with limitation of data availability. The study analyzed this impact by using three different models in the study. The Model 1

specification finds the impact of financial liberalization on the financial development while controlling for inflation, real interest rate and legal origin. Specification of Model 2 relates also governance with financial development and finds the impact of financial liberalization and governance on the financial development while controlling for the control variables. According to Model 3 specifications, the study instrumented the governance in the model for financial liberalization. The study endogenizes the governance in place of the financial liberalization and finds the impact of instrumental variable on the financial development, where inflation, real interest rate and the legal origin are the control variables.

The empirical study first imply pooled OLS technique both on model 1 and model 2 but according to diagnostics due to the presence of the heteroscedasticity in the data, the study moves further for fixed effects technique for both models. Here again the Wald heteroscedasticity test and Wooldridge (2002) autocorrelation test were applied by the study. The study found the presence of heteroscedasticity and autocorrelation in both models. Then the study used the panel-corrected-error technique (PCSE) for both the models to correct the problems of heteroscedasticity and autocorrelation. The results of the PCSE technique conforms that most of the variables of both models are statistically significant upto 10 % level of confidence. The statistics of the model 1 indicates the direct relation of financial liberalization and financial development. The relation of financial liberalization and development is ambiguous because some theories suggest the positive relation while some are proponent to it and suggest the inverse relation. This impact is although positive but highly insignificant. According to theories this ambiguous relation of financial liberalization and development may be due to other factors such as institutional quality, policy reforms that can be called as governance. Financial liberalization can be helpful in sustained financial development if well-behaving institutions of governance are working. As many empirical studies support the view of presence of governance for reaping the positive benefits from financial liberalization that's why this study uses the governance variable in the second model. The study finds that the governance impact positively on the financial development and relation of financial liberalization and financial development is also positive but insignificant. This insignificant relation may be due to the reason of increased risk of speculative attacks, capital flight and instability of banking industry after the financial markets get liberalized. These can be the reasons of insignificant relation of the financial liberalization and financial development. To get thorough insight of the role of governance , the study in the third model instrumented the governance in place of financial liberalization, to see how governance impact the development if it is used as instrument of financial liberalization. The statistics of third model reveal that governance impacts positively to financial liberalization which inturn impact the financial development positively. The relation of financial liberalization and financial development appear direct, when governance was instrumented against financial liberalization. This leads to conclude that good governance directs the financial liberalization to financial development of the country. So the study concludes that due to good governance and improved institutional quality, financial liberalization brings fruitful outcomes for the development of economy and its financial sector. So to reap the fruitful results from liberalization, economies should implement good governing policies and improved institutional quality should be encouraged and maintained.

Based on the empirical results, the study concludes that financial liberalization alone cannot give the expected positive results as the institutions also matter. That's why institutions should be developed properly and also should be managed accordingly. Means there should be a proper system of check and balance for these institutions so that they can perform better and also should be elastic to changes and reforms in the policies and institutions.

Stable political government and good governing policies also matter for the development, as the safer the economic and financial environment of the country will be, it will be a better platform for the investment. So countries with stable political environment can attract more capital inflow which can be used in the financial stream of the country. To get the benefit of financial liberalization countries should have safer and stable government and better policies.

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An Integrative Framework Capturing Kyai Charismatic Leadership And Madura Society Welfare Level In East Java - Indonesia.

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Abstract

Objectives - The models used in the empirical study of leadership kyai in Madura ethnic in line with the more modern environment changes. Reflecting the environmental change this paper aims to propose a framework for leadership of charismatic kyai in Madura ethnic-based impact on the welfare of stimulus-organism-response (S-O-R) wide.

The design / methodology / approach - This paper offers a conceptual framework that integrates the components of the leadership of religious scholars in ethnic Madurese kharismatic.

Findings - This framework is useful for academics and regions. This framework can help steer academics to various existing literature charismatic leadership and help researchers development empirical studies that describe ethnic leadership kyai in Madurese. For the professional, this framework can be used as guidance in building a successful region.

Research/ Limitations/ implications - This paper does not examine empirically the proposed framework. However, this paper provides suggestions for future research, including reviewing the empirical structural relationships in this framework.

Key word : Leadership, charismatic, kyai, and SOR, Paper type : Conceptual paper

INTRODUCTION

In fact Madura natural resources is quite a potential for capital in efforts to improve society quality of life, especially in terms of economic aspects. But the reality of the Madurese community itself can only enjoy a small part (20-35%) of the toil and labor in an effort to increase revenue by empowering natural resources which potential so high among such salt processing, tobacco, agriculture, fisheries, mining, farming and natural attractions. Madura natural is quite likely and rich, but to be said the rich, Madurese is inappropriate because the majority of inhabitants are in low medium economic level. And it can be proved that the ethnic of Madura are spread throughout Indonesia, the number of tribal population is around 3 million inhabitants spread to several areas in Indonesia (BPS, 2015).

Madurese is well known for speaking style like outspoken and has properties that loud and irritable, and high self-esteem and this is a very fundamental thing in the Madurese

community. The values of the self-esteem is when it is in contact with the ego, women, religion, land and water. The primary basis of self-esteem is a shame (todus). Ethnic Madura has always stressed on "tambana todus mate", which could mean that the cure of shame is dead. Examples of various areas where ethnic Madurese always collide with other ethnic groups in the archipelago, the small sample when ethnic Madurese clash with ethnic Dayaks in Sampit town, Balikpapan, Surabaya and other cities. If it is associated with the 21st century, the cure of shame actually is having, mastering and capable of mastering science, behavior, capable of competent with character and has a particular expertise and be able to act and solve the problem on its own when facing problems, especially economic (problem solving).

Professor Deliar Noor said that the Ethnic Madura is a bastion of Islam Indonesia because the provision of religiousness of the Madurese and the roots of a very strong understanding of Islam, though sometimes still seen doing the ritual of 'Pethik Laut' (the Javanese language is float an offering) and Madura also known as Madinah porch. In addition to the peculiarities of the Madurese described above on the other hand is known as savers, discipline, and self-conscious development. To hajj, Madurese though poor certainly and always set aside a little of their income for savings in order to perform the task of pilgrimage as a responsibility in running the fifth pillar of Islam.

Facing the reality of the Madurese today, to be able to increase income per capita and the global world as it was rolling today will impact into the world of materialism and pragmatism, to face it all so as not to get stuck on the morality of foreigners which contrary to customs and local morality in this case Madurese ethnic, especially with existing infrastructure currently used, existence of a bridge Madura to Surabaya and vice versa will facilitate social change which so strong the influence, here that needed a leader figure who is able to influence and invite the community of Madura to participate in improving the welfare. Here researchers raised the issue on the influence of Charismatic Kyai Leadership through culture that have an impact on the economy. It required figure of Kyai in order to fortify themselves so that the Madurese are not asleep to be affected by foreign culture even though it is not easy.

The second view of researchers is disputed by Kuntowijoyo stating that the strong influence of Kyai or clerics in Madura society due to ecological factors and social system. Natural resources owned by ethnic Madurese for economic improvement in addition to cultivated fields that have a high potential such as salt processing, agriculture, farm tourism, ecology factor of moor until now still dominant, and these will be developed that have a promising perspective in improving the economic value of the moor alone. And we know with the Green Revolution and the Blue Revolution in agriculture, it has not been able to change the system of social, political and cultural of Madurese. Seeing geographical condition of Madura Island from the economic side is expecting from the natural resources of the sprawling barren moor land and water availability is very limited. Nationally, in the economy of Madurese, income per capita is still 8.4 million / year while in average outside Madura, East Java district, its income per capita is 26 million / year (CBS, 2011). Moor ecosystem has become one with the Madurese, making it difficult to separate the effects on social organization and society symbol system. Pattern of moor ecosystem is optimized on processing land with potatoes, corn, beans and cattle is developed which intended to show the pattern of settlement, improving the welfare and at the same time village organization. Related with Madura community that has its own peculiarities and religious communities, religiousness symbols are often used and impose their choice on Kyai figure. The top layer of social stratification occupied by the Kyai, they are seen not only as a religious leader but also as a society and in general, Kyai deemed to have control of legitimacy and charismatic authority that the effect of leadership readily agreed and strangely

more difficult to accept the opinions of others who have knowledge, insight, scientific integrity. Kyai leadership competencies are an important effect on several fronts. At the same time in addition to master religiosity, Kyai also master in social activities and even politics. Kyai Leadership understood correctly about the character of the Madurese besides its high religiosity in applying the pillars of Islam. Madurese striking character is self-esteem. In a review of studies on Kyai leadership in Madura society does not yet exist in the literature review, researchers tried to dig through the framework of Kyai charismatic Leadership on the culture of society, public welfare of Madura in East Java.

LITERATURE

According to Dhofier (1984) Kyai degree of Madurese community has a special characteristic that is a degree given by the community to someone who became head of the boarding school and has a religious knowledge of Islam. Kyai degree is shaped and determined by society, and it is not a degree that is created solely by the religious scholars. The degree is a social degree that determines the prestige of a person in society.

In studies of Townen-Bouswsma (1988) and Jordan (1985) it can be concluded that there is a strong indication of the government's failure to integrate political and economic system which is national in nature in the Madura society's life. This failure is caused by the inability to solve problems, less thinking based on analysis (accurate) and conceptual, not able to able to balance the achievement of objectives and priorities. A politician (not compromise) and diplomats (representing the team) does not work with others (superiors and subordinates).

Charismatic leader, according to Ivan Ceviche, et al. (2007), was able to realize the atmosphere of motivation on the basis of commitment and emotional identity on the vision, philosophy and their style inside the subordinates's mind. Conger and Kanungo (1987) in Yukl (2001; 291) states charismatic leadership theory is based on the assumption that charisma is a related phenomenon (attributional). According to this theory, attribution of followers from charismatic qualities for a leader, jointly determined by: (a) behavior; (b) the leader skills and; (c) aspects of the situation. Explanation of attribution is able to predict what is causing others show certain behavior. Charismatic leader capable of playing an important role in creating individual changes with qualities of a hero who has charisma.

The indicators (Yukl, 2005) includes exciting vision, strong and expressive communication, personal risks taking and making sacrifices themselves, delivering high expectations, showing the assurance of followers, building identification with the organization / group and providing authority to followers. Charismatic leaders are generally born from religious groups that get high religious education, have high morality, and tremendous appeal. (Bastiah, 2013). Leadership, according to Locke (1991) suggested that leadership is the process of persuading other people to do something to achieve a common goal. Hersey and Blanchard (1982) suggested that leadership is a pattern of behavior that is displayed when trying to influence the behavior of others. Elements of a charismatic situations, among others: (a) the existence of a crisis, (b) requires a change; (c) chances to convey ideological purposes; (d) the availability of dramatic symbols; (e) the opportunity to explain the role of followers in handling the crisis. The characteristics and behavior of charismatic leaders such as: (a) outstanding confident; (b) has a vision, and is able to express the vision explicitly; (c) behavior outside the rules / unconventional; (d) have great communication skills and (e) are willing to sacrifices themselves, take personal risks. Reality in the field showed charismatic leadership has role in the Madura community that the followers greatly respect and appreciate his leadership as the impact of excess religious competence, loyal and faithful to their kyai/leader, loved the leader,

hope on high performance as well as the principles of followers compliance toward the ‘kyai’ or leaders.

FRAMEWORK OF RESPONSE ORGANISM STIMULUS (SOR) IN LEADERSHIP

Framework of S-O-R in psychology environmental / ethnicity (Mehrabian and Russell, 1974), is widely adopted to investigate the influence of traditional ethnic (Baker et al., 2002; Bitner, 1992 ;) to the public response. In addition, some examples of the research will be presented to supports the integration of the components of Kyai leadership models for the Madura ethnic welfare. Figure 1 shows model component integration within the framework of the SOR and offers a set of variables for each component that is synthesized from several empirical studies on Kyai leadership. The following is a discussion of each component within the framework.

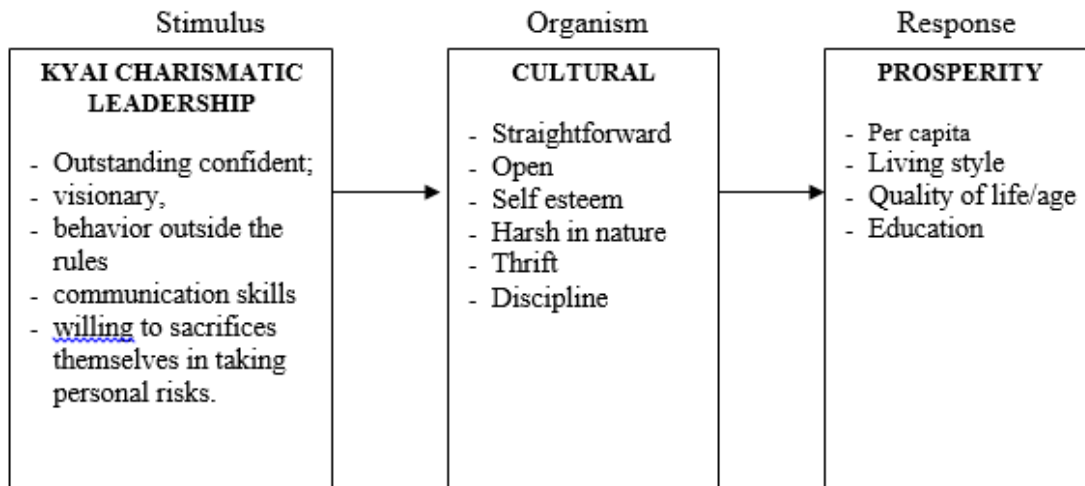


Figure 1: Framework of SOR in Kyai Leadership

Stimulus

Stimulus is a boost in the environment of Madura ethnic communities that could potentially affect cognitive processes / awareness and affective / emotional society. Stimulus studied in empirical research varies by the type of Madura ethnic environment (for example, traditional society, and culture). In addition, the researchers (Baker et al., 2002; Bitner, 1992; Turley and Miliman, 2000) synthesize the literature on the effect of the traditional environment on the community response to produce several different structured factors which, however, also include the same stimulus variable. Environmental and social factors influence Kyai as a charismatic leader.

Surrounding environmental factors (ambient) include non-structural elements of society (for example, education, and access to information). Variables studied differ based on surrounding environmental cues. For example, compatibility with other cues (Bone and Ellen, 1999; Fiore et al., 2000 ;); Modern (Ward and Davies, 2003) ;

Most of the research on the influence of environment and charismatic leadership on the approach responses employing experimental methods, which only considers one variable stimulus alone (Bellizi and Hite, 1992). There are some exceptions to this trend. For example, Baker et al. (1992) analyzed the effect of a combination of cues in surrounding environment and social cues (number and hospitality). Some of the personal traits that got the attention of researchers are: cultural values (Overby et al., 2004; Tse et al., 1988); decision-making style (Sharma and Stafford, 2000; Wesley et al., 2006); leadership opinions (Flynn et al., 1996; and demographic characteristics examined included: age (Yalch and Spangenberg, 1990;); the level

of education, ethnicity (Herche and Balasubramanian, 1994); and gender (Yalch and Spangenberg, 1993).

Organism

Organism includes the processes of intercession between stimulus and response of consumers. Cultural variable that consisting of Straightforward, Open, Self-esteem, Harsh in nature, Thrift, Discipline reflect intercession mechanism in the organism. Each component of the organism will be discussed separately from this research, but it must be remembered that these components are interrelated.

Response

Response is the end result of internal processes in the organism, which is expressed as the behavior or intentions that related with influence or not influence the Madura society as Per capita, Lifestyle Quality of life / age and Education (Bitner, 1992). The interpretation of this response is in accordance with the behavioral component of model that focuses on the selection of the attitude to develop. Holbrook (1986) if it is associated with the consumption model emphasizes that the value is the result of the experience of consumption, including the use of post-purchase product, which indicates that the value can be understood as the result of post-response. Perception of values influence the selection, evaluation, purchase, use, and ultimately customer satisfaction / community. In addition, the perception of the value derived from one offer of experience given by a figure or Kyai as a leader can affect the outcome of the leadership. For example, the value used as reference is Madura ethnic that pleasantly affect the perception of the leadership of Kyai, which in turn affects the mindset and lifestyle of the people of Madura.

DISCUSSION

Kyai is the social status of a person which in itself is attached to a variety of roles. One of these roles held by Kyai is the role of a leader amongst the people, because of his position is outside government official structures, the Kyai can be categorized as informal leader. When Kyai serve as the leader, authority, role and trust in the leadership would received no doubt though mastery technically still needs to be improved, but strategy in the leadership of sciences concerning with the technical things will be devolved to his assistant according to its area, realized in collaboration in decision-making. Leadership of Kyai moreover recognized extends not only in 'pesantren' (school of Koranic studies for children and young people) and 'silat' (traditional self-defense arts) college as the area of leadership but also to the surrounding society. Criteria of Kyai besides mastering religion-based science, has followers / students, relationship with parents who board their son/daughter, society environment and at the same time could be used for political purposes considering its thousands of followers throughout Indonesia. Leadership of Kyai according to Gross, Masson and Mc Eachen in their writing Explorations in Role Analysis defines the role as a set of expectations imposed on individuals who occupy a particular social position. These expectations are a balance to social norms and therefore it can be said that the roles are determined by the norms in society.

Role according to Levinson covers three things; (1) The role includes norms connected to person in society; (2) the role is a concept of what can be done by individuals in the community as an organization; (3) The role can also be regarded as individual behavior that are important to the social structure of society. From some views about the role above, it can be concluded that the role of Kyai in Madura in addition to the individual, the mastery of religious, descent earlier, authority, has the social status in society which is no less important since what is presented is always receive positive response that is sometimes offensive to the women's right gender element such as marriage that does not follow the laws of marriage, as long as they are

already past the age of 17-18 years akhil baliq age, then they are already legal to married. So the role of Kyai in influence, mobilize the community in terms of the values of religious and improve household incomes in optimizing the potential of the area that is said to have not explored maximum will be materialized whether in fisheries, agriculture, land-use fields, salt farmers and finally that being performed by the present government is mainly cattle ranch.

Especially in the current era of reform, the values of decentralization and regional autonomy oriented to government's approach to the community through participatory government policy, accommodative to the public so that the regional policy is expected to impact on the improvement of people's welfare. It really needs charismatic leadership as the role of the Kyai. In Madura itself, the tendency of decentralization realization and regional autonomy are even more increases the burden and cost of living so that the impression of leadership in government is less trusted by the public especially their many public officials involved in corruption.

Culture of Madurese society that become its special characteristics include a straightforward, open / outspoken, choleric, hard in nature, and thrift and discipline. Kyai were able to take advantage of their higher quality and make it meaningful in everyday life, which in turn is able to be independent in life, especially in improving the quality of life in terms of economic and social life. Social interactions of Madurese according to Geertz (1981) is elements of social culture that was born from things that presumed to exist in social life so that according to the authors there is a significant relationship between Madurese character with Kyai leadership that charismatic. And also described by the researchers that there was also a factor of heredity from parents or any family relationship which is strengthened with the previous such as Glaser and Moyuihan (1981) which stated that the essential elements of primordial such as genealogy (heredity and kinship ties), the system of trust / religion and language.

The leader is a person who has the ability and authority to direct and empower the potential of the human in community that being led in order to realize the objectives aspired together. Hoy and Miskel (2001), power and authority is said to be the ability to make others do what the leader wants, as also defined by Weber (1974) that the possibility that an actor who is in a certain position in a social relationship can win what being desired although by against it. Based on the above opinion there are three things that become the main discussion concerning the figure of leaders, among others; (a) leadership; (b) power and (c) authority?

Meanwhile, the researcher revealed that the leadership of Kyai who is charismatic and understand the culture of the Madurese that has its own peculiarities which have never been revealed by previous researchers as Hoy and Miskel besides a leader who only have the power and authority as well as the leadership, the leadership of Kyai is supported the ability of a visionary based religious and willing to sacrifice for people who led although taken from the assets owned by a religious-based leaders and their heredity factor which became the trust of public earlier so his charisma gained from their offspring.

CONCLUSIONS AND IMPLICATIONS

In closing, we advocate the use of the proposed framework for managing wider literature on Kyai leadership in Madura ethnic communities. Readers who are interested to in-depth review of the literature on Kyai leadership and community welfare in Madura, the texts is the originator of the idea to be developed. When reading the literature, connecting research variable with components of the framework will facilitate the arrangement of the similarities and differences in the literature. The proposed framework could help researchers in

developing empirical studies linking Kyai leadership approach to Madura ethnic behavior. In addition, future research could investigate new links between the components of the framework. For example, the influence of the descendants of Kyai that already exist previously on Madurese ethnic behavioral changes. In the end, the influence of these variables to changes in the Madurese ethnic affection and the proposed framework could also serve as guidelines for professionals to develop successful leadership.

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“The Leather Industry Development in Tanggulangin in Facing Asean Economic Community (AEC) 2015 with Quantitative Strategic Planning Matrix (QSPM)”

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Abstract

In facing the Asean Economic Community (AEC) 2015, the challenge that is being faced by Indonesian citizens of using the ASEAN market, the competitiveness is still relatively low compared other ASEANS, especially Singapore, Malaysia, and Thailand. The problem that was faced by grand entrepreneurs which incorporated in INTAKO cooperative in facing competitiveness are qualified products, SNI certificated and primary services. Then leather crafts industry in Tanggulangin, Sidoarjo needs a development strategy so that leather crafts industry in Tanggulangin could not cease to exist and is prepared to face the competitiveness. The purpose of this research is to know the leather crafts industry's development work model which incorporated in INTAKO cooperative in facing ASEAN market especially MEA 2015's enforcement. This development strategy is capable to compete with other/similar products from ASEAN nations. We wish that the choosing of this strategy model is capable to elevate quality products using skilled human resources, fueled raw material supplies, supporting modernized media and tools, product innovation, primary service and integrated promotion. The data analysis method that is being used was SWOT Matrix and QSPM Matrix (Quantitative Strategic Planning Matrix). The result could be concluded that the SWOT analysis to evaluated of Internal Factor and External Factor by using IFI matrix and EFE matrix and formulated into SPACE matrix that the position of the company was cuurently in an aggressive position. Meanwhile the priority being produced by QSPM Matrix is the biggest priority that is market penetration (first strategy). The result from QSPM Matrix calculation was a strategy with the highest weight as to 6,558. Data analysis method used was Matrix QSPM (Quantitative Strategic Planning Matrix). Discussion, it can be concluded that the SWOT analysis to evaluate internal and external factors by using matrix EFI and EFE and formulated into the matrix space that the position of the company is currently in an aggressive position. Based on the results of matrix calculations QSPM elected with the highest weight strategy was a first strategy (all in market penetration strategy).

Keywords: Quantitative Strategic Planning Matrix (QSPM).

INTRODUCTION

Tanggulangin is one of the districts in Sidoarjo that some of the civilians are working in a small leather crafts industry. Varieties of needs in leather materials are produced in this place, starting from slippers, shoes, bags, wallets, suitcases, and jackets, and other things based on leather materials. This leather crafts industry actually started from 1939, and at that time some of the Tanggulangin's bags craftsmen started with bags and suitcases.

The AEC 2015 enforcement had made the government prioritized 9 industry sector to develop in order to fill ASEAN markets, some of them are; agro-based industries (CPO, cocoa, rubbers), fish-processed product industries, TPT industries, shoes and leathers industries, furniture industries, food and beverage industries, and basic metal, iron, and steel industries. The quality product's standard will subscribe to ASEAN's quality standard. Up until now, UMKM products that have chances in ASEAN market, was obstructed by that quality standard.

The problems faced by Small and Medium Industry facing MEA end of 2015 including availability of various industrial raw materials are still many imports, for his own cowhide required of approximately 5,000,000 (five million) pieces, but new domestic production of 2,000,000 (two million) pieces. The results of the research that has been done in INTAKO, where most SMEs do not have SNI certification. Moreover, for the scale of Southeast Asia is very unfortunate. So concerned shall direct that SME products certified SNI. Another obstacle is not able to meet demand for the number of buyers of products so as to reduce the credibility of SMEs. Lack of facilities to INTAKO, so it would be difficult for buyers who do not know for sure that will impact buyers saturation or less comfortably. This can impact the buyer will be looking for somewhere else besides INTAKO. While the last factor is the quality of service. Lack of uniformity both clothing and the service would be bad images for SMEs. The more services received does not match the buyer hopes the buyer will move on to another place that is welcoming and comfortable.

LITERATURE REVIEW

According to Fred (2010:5), strategic management could be defined as art and knowledge in formulating, implementing, and evaluating functional-traffic decisions that enabled an organization to reach its purpose. Strategic management focused on an effort to integrate management, markets, financial/accounting, product/operation, research and development, and information computer to reach organizational success.

Strategy formulating techniques according to David (2011:76) are integrated to three steps of decision-making framework. The tools presented in this framework applies to every size and kinds of organization and could help, identify, evaluate, and choose strategies. Steps of decision-making framework could be seen in Strategy Formulation Analytical Framework below.

Picture 1: Strategy-Formulation Analytical Framework

Stage 1 : The Input Stage				
External Factor Evaluation (EFE) Matriks		Competitive Profile Matriks (CPM)		Internal Factor Evaluation (IFE) Matriks
Stage 2 : The Matching Stage				
SWOT Matriks	SPACE Matriks	BCG Matriks	IE Matriks	Grand Strategy Matriks
Stage 3 : The Decision Stage				
QSPM Matriks				

Source: David (2011:177)

Picture 1 shows the decision making steps framework in formulation strategy. A basic information summary was formed in the first step to formulate a strategy. In input stage there are 3 matrix that is External Factor Evaluation (EFE), Internal Factor Evaluation (IFE) dan Competitive Profile Matriks (CPM). Information from the third matrix becomes the foundation of matrix arrangement and decision-making by determining the corresponding weigh and rating.

Formulating strategy techniques could be integrated into three steps of decision-making framework:

- a. Input stage, contains basic information that's needed to formulate a strategy.
- b. Matching stage, focused on rational alternative strategy making by noticing primary external and internal factors.
- c. Decision stage, involving only one technique, planning matrix, quantitative strategy (QSPM)

SWOT Analysis

SWOT analysis is a way to analyze competitive position of a company. SWOT analysis is using SWOT matrix to audit or rate an organization within its environment. In analytic strategy formulation, SWOT analysis is the first step in Matching Stage. In arranging SWOT matrix, the decision-maker focused on the main problems which therefore helps them to formulate strategy planning.

Matching the primary external and internal factors is the hardest part in developing SWOT matrix and it needs a great assessment.

1. SO strategy utilize the company's internal force to attract profits from external chances. Originally, an organization will run WO strategy, ST strategy, or WT strategy in order to perform SO strategy. If an organization is being faced by a great threat, then a way to avoid it is to concentrate on chances.
2. WO strategy is to fix internal weaknesses in taking profits from external chances. As an example of internal weakness that becomes an obstacle: there may be a high chance of demand in electronics to control the fuel injection time and amount into a machine car (chances), but a spare part producer could not have the needed technology to produce the tool (weakness). One of WO strategy is to acquire this technology through joint venture with other companies who have competency in this aspect. Other alternative is to recruit and train people to have technical capabilities that are needed.
3. ST strategy uses power to avoid or reduce the impact of external threats. This doesn't mean that a strong organization have to always face direct threats in external environment. Example, when Texas Instruments uses an ideal law institution (strength) to have compensation and royalty as much as 700\$ from the total of nine Japanese and Korean companies that violates memory chip and semi-conductor patent (threat). This is surely a big threat to every industries possible.
4. WT strategy is a defensive tactic to reduce internal weakness and to avoid external threats. An organization with internal weakness and external threats are in a dangerous position and they may have to work to survive, doing merger, contraction, self-acclaiming broke, or choosing liquidation.

Systematic picture from SWOT Matrix is showed below. A SWOT matrix consists of 9 cells. 4 main cells, 4 strategy cells, and an empty cell (top left). The 4 cell strategy developed after complementing the main cell factor.

There are 8 steps to make SWOT matrix:

1. Make a company's main external chance list.
2. Make a company's main external threats list.
3. Make a company's main internal strength list.
4. Make a company's main internal weakness list.
5. Match internal strength with external chance, and note the result in SO strategy cell.
6. Match internal weakness with external chance, and note the result in WO strategy cell.
7. Match the internal strength with external threats, and note the result in ST strategy cell.
8. Match the internal weakness with external threats, and note the result in WT strategy cell.

QSPM Matrix

QSPM Matrix is a matrix used in the decision stage. This QSPM matrix shows the best alternative strategy to be implemented in the company. In this matrix, the company tests some the best alternative strategy that could be found on the previous stage. The purpose of this QSPM matrix is to determine which the best strategy to be implemented is.

In the decision making stage, the organization needs to arrange the priority list. QSPM is a technique objectively could settle the prioritized alternative strategy. QSPM is used to minimize strategy amount by determining relative attract from every strategies. QSPM has advantages and limitations (Nurfita, 2011). Some of QSPM advantages are 1) the strategy series could be observed in orderly, 2) boost the strategy planner to put in relevant internal and external factors into the decision process, 3) developing QSPM minimize the chances that main factors are missed or excessively given weigh, 4) QSPM could be adapted to be used by profit and nonprofit oriented companies so it could be applied to any kinds of organization, 5) the small decisions increase the probability that the end's strategic decision is the best for the organization.

Limitations from QSPM are 1) QSPM always needs intuitive and assumption based assessment, 2) discussion between strategy planner, manager, and coworker in the process of formulating strategy is a constructive thing and fixing the quality of strategy decision, 3) QSPM could only work by precondition information and matching analysis is to be based on. The steps in arranging QSPM are: (Iskandarini, 2004)

1. Making external (chance/threat) factor list and internal factor (strength/weakness) list in the left column of QSPM.
2. Giving weight for every external and internal factor.
3. Analysing the matching matrix from step two by identifying the alternative strategy that is to be implemented.
4. Giving alternative score with the span of:
 - a. Score 1 = without attractiveness.
 - b. Score 2 = Low attractiveness.
 - c. Score 3 = Medium attractiveness.
 - d. Score 4 = High attractiveness.
5. Timing the weight and alternative score in each internal and external factor in every strategy.
6. Add up every alternative score.

RESEARCH METHOD

This research is a continuous research from 2015 that is done in some leather craft industry (mostly bags and suitcases) in Tanggulangin, Sidoarjo. Primary data was obtained from interviews and questionnaire from respondent, observation in field to know the competitive,

external and internal factors. Secondary data was obtained from literature study and internal bags and suitcases industry.

The criteria will be examined respondents who have knowledge and have experience of the object under study. Respondents were selected to represent a company that is considered to have deep understanding of the competitive conditions and the condition of the company as a whole, such as administrators, entrepreneurs who are members of the Cooperative INTAKO, Department of Industry and Trade Sidoarjo, East Java Province and Kadin East Java Province.

1. Qualitative data, based on descriptive information as related to the submitted problems.
2. Quantitative data, based on numbers as related to the submitted problems.

Based on the source:

1. Primary data was obtained directly from the main source in the companies joint with INTAKO cooperation as to spoken or written from respondent, including interviews, questionnaire, and observation.
2. Secondary data was obtained from some parties in related to this study.

Data accumulation method

1. Questionnaire, the distribution to stakeholders and interviewees as to weight giving and reviewing internal and external factors.
2. Interview, as to stakeholders and experts who knew the potential from INTAKO's joined companies using guide interview that has been prepared beforehand.
3. Observation, on field to see entrepreneurs in INTAKO's joined companies.
4. Documentation, learning documents that are related to the study.

Analysis data method

Analysis data method is used to simplify every accumulated data, systematically presented, then process and interpret the meaning of the data. This is to provide answers from the problem of this study. The problem in this study is using SWOT analysis to devise the development strategy with QSPM method.

Descriptive qualitative analysis is an arranging, numbering, classifying, coding, categorizing, and interpreting qualitative and quantitative information without the involvement of numbers.

DISCUSSION

Respondents in this study are from 53 respondents there are 45 respondents to fulfill the criteria. 8 respondents does not with 6 going out of town and 3 resigned.

SWOT Analysis

Is one way to analyze the competitive position of a company? SWOT analysis using a technique or a tool called a SWOT Matrix to audit or assess an organization and its environment. In the analytical framework for strategy formulation, SWOT analysis is the first step in Phase Matching. In preparing the SWOT matrix, decision-makers put the focus on the main issues, which then helps them to formulate the strategy.

Table 3 SWOT Matrix

	Strength (S)	Weakness (W)
	1. A lot of qualified manpower	1. Slow development of products.
	2. Cooperation compiles leather production.	2. Less maximal in serving the costumers.
	3. Raw materials supplier is still fulfilled.	3. Independent promotion is not maximal.
	4. Sopshiticated production machine.	4. Products aren't SNI-certificated yet.
	5. Getting promotion support from leather industry exhibiton.	5. Low quality product
	6. Products with affordable price.	
Opportunities (O)	S-O Strategy	W-O Strategy
1. Government's policy in enhancing industry sector for AEC.	Educated manpower is enough to compete (S1, O2)	Promotion should be enhanced (W3, O2, O3)
2. Leather crafts industry is still considered as the best industry.	Doing intensive promotion (S5, O2, O3)	Product development needs to be enhanced (W1, O1)
3. Vacation enhancement to Tanggulangin	Product with competitive prices (S6, O6)	Product needs to be certificated (W4, O4)
4. Raw materials and product buying are reachable		
5. Leather crafts products are having potential as market leader		
Threats (T)	S-T Strategy	W-T Strategy
1. Products from ASEAN would add the competiton	Manpower needs training (S1, T5)	Product development should be intensified (W1, T4)
2. Products from other countries with much affordable prices	Affordable and qualified products (S6, T2)	All products needs to be SNI certificated (W4, W5, T1, T4)
3. Society chooses import products because of the quality.	Increasing promotion with social media (W3, T1)	
4. Same kinds of products from ASEAN		
5. Enhancement of foreign manpower's wage.		

QSPM Matrix Analysis

After developing a number of strategic alternatives, the company should be able to evaluate and then choose the best strategy palingcocok with the company's internal conditions and external environment. There are 6 steps to make QSPM matrix (David, 2002):

1. Arranging the same list as swot
2. Giving weight

3. The same as ifi and efe
4. Arranging alternative strategy that is to be evaluated
5. Attractiveness score
6. Counting total alternative score. Adding weight with as value on each internal/external factors in every strategy
7. Counting the total of as

Table 3. Total Alternative Score (TAS)

No	Factor	Weight	Strategy 1		Strategy 2		Strategy 3	
			AS	TAS	AS	TAS	AS	TAS
	Strength							
1	Leather crafts industry in Sidoarjo have qualified labor.	0,111	4	0,444	4	0,444	3	0,333
2	Having cooperation to compile leather crafts production	0,118	2	0,236	3	0,354	3	0,354
3	Raw materials from supplier is still reachable	0,119	3	0,357	3	0,357	4	0,476
4	Having sophisticated production machine from merchant ministry	0,112	3	0,336	4	0,448	4	0,448
5	Getting promotion support from Of place and leather crafts product exhibition	0,116	3	0,348	3	0,348	3	0,348
6	Marketed products have affordable price	0,108	3	0,324	4	0,432	3	0,324
	Weakness							
1	Acceleration in developing products is still slow	0,048	3	0,144	3	0,144	4	0,192
2	Less maximal service to costumer	0,058	4	0,232	3	0,174	3	0,174
3	Promotion independently without the assistance of relevant authorities is still less than the maximum	0,054	4	0,216	4	0,216	4	0,216
4	Handicraft products waas not yet ISO certified.	0,048	4	0,192	3	0,144	4	0,192
5	Low product quality.	0,053	4	0,212	4	0,212	4	0,212
6	Limitations of venture capital	0,056	3	0,168	3	0,168	3	0,168
	Opportunities							
1	Leather industry has a huge potential market in which the population of the largest in the ASEAN Indonesia .	0,119	3	0,357	3	0,357	3	0,357
2	Leather products has the potential to become the market leader especially in East Java during the Asean Economic Community (AEC) menginggat the support of the Provincial Government promotion. East Java regency. Sidoarjo.	0,124	4	0,496	3	0,372	3	0,372
3	Government policies in terms of increasing the industrial sector to face the Asean Economic Community (AEC).	0,127	3	0,381	2	0,254	2	0,254
4	Leather industry in waas until today is still regarded as the best craft center in East Java.	0,126	3	0,378	2	0,252	3	0,378

5	With the ASEAN free trade or AEC, is affecting an increase in tourist visits to Tanggulangin	0,127	3	0,381	3	0,381	2	0,254
6	Purchase of raw materials and the addition of production equipment from abroad can be purchased easily.	0,116	4	0,464	3	0,348	3	0,348
	Threats							
1	The products of ASEAN will flood the market in Indonesia entry into force of the Asean Economic Community.	0,049	3	0,147	3	0,147	3	0,147
2	Products from other countries cheaper prices with a wide variety and quality of products	0,058	4	0,232	3	0,174	3	0,174
3	Indonesian residents often prefer to buy foreign products as the life style and the assumption that foreign products of better quality.	0,054	3	0,162	4	0,216	3	0,162
4	The emergence of similar products originating from ASEAN countries.	0,049	3	0,147	3	0,147	4	0,196
5	The increase in labor costs is likely caused by a number of skilled workers seeking work in Indonesia.	0,051	4	0,204	3	0,153	3	0,153
Total				6,558		6,242		6,232

QSPM above calculation results based on the input from internal matrix external weights, as well as the strategy alternatif matching stage. So, after collecting data then can be some of the results for comparison with the strategy of internal factors and external factors, among others, the strategy of 6.558, 6.242 and strategies of two of the three strategies of 6.232. Based on the results of matrix calculations QSPM chosen strategy with the strategy of the highest weight of 6.558. (Market penetration strategy). Market penetration, which is trying to increase market share for existing products on the market through a more vigorous marketing efforts.

Market penetration strategy to be successful, then the craft industry entrepreneurs Tanggulangin Sidoarjo regency leather industry should be supported by, among others:

1. Support the Government in the development of infrastructure businesses boost productivity and encourage the growth of the business, will have no significance for the community, if their products can not be marketed or, if they can be sold, but at a very low price. Therefore, it is an important component in efforts to increase the quality and quantity of products Tanggulangin leather industry is the production and marketing infrastructure. Through their marketing infrastructure from the production site to the market, will reduce the marketing chain and ultimately increase revenues Tanggulangin leather industry.
2. Network development handicraft industry leather industry Tanggulangin Sidoarjo. Through the development of business jaringan be expanded with a wide range of network patterns, for example in the form of subcontracting network. The pattern of such networks already formed but in realitasnya still not optimal. The pattern of business networks through subcontracting can be used as an alternative for the existence of the craft industry leather industry Tanggulangin Sidoarjo. But

unfortunately many small industries that just do not have a network of subcontracting and linkages with large companies that are vulnerable existence. So have the opportunity to be a product that has a competitive advantage and can compete in the global market.

3. Banking provides capital credit facilities. Through the ease of obtaining loans for entrepreneurs Tanggulangain leather industry, is expected to be capital untuyk product development. Thus the bank is expected to no longer just hunting for companies that have been established, but also a pioneer to develop the potential of the economy by growing the leather industry employers Tanggulangain Sidoarjo district through support of the ease of obtaining capital for business development.
4. Leather industry Tanggulangain Sidoarjo Regency wile employees is an important factor for any business as well as in the small business sector. The success of small-scale industries that can compete with similar products and are able to penetrate global markets or face of imported products in the domestic market is determined by the ability of actors in the small industry to develop products so that their business can still exist. Makia development of small and medium enterprises, governments need to improve training for the leather industry Tanggulangain Sidoarjo district both in terms of entrepreneurship, administration and knowledge and skills in business development. Improving the quality of human resources is done through various ways such as education and training, seminars and workshops, internships in the workplace and business cooperation.

CONCLUSION

Based on the results of data processing and analysis in the previous chapter, it can be concluded as follows:

- a. SWOT analysis to evaluate internal and external factors by using matrix EFI and EFE and formulated into the matrix space that position the company at this time are in a position Aggressive
- b. Priority produced by QSPM matrix is the greatest priority is the market penetration (the strategy). The results of matrix calculations QSPM chosen strategy with the highest weight of 6.558.

RECOMMENDATION

Suggestions can be submitted in this study are:

1. To develop its business Tanggulangain leather industry employers Sidoarjo district needs to be improved internally which includes improving services, increasing the number of production, ISO certified products, accelerate product development, and increase promotion.
2. Employers Tanggulangain Sidoarjo regency leather industry need to start to do the promotion by using flyers, brochures, leaflets, pamphlets, or other promotional media, so that more potential customers know of the existence Tanggulangain leather industry.

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Management Problems of Turkish Businesses in Afghanistan: The Case of Kabul and Mazarisharif

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Abstract

Economic, political, social and technological changes worldwide have reached to massive sizes. Together with mass communication, markets have expanded and dimensions of competition have increased accordingly. The present study was conducted to identify management problems experienced by Turkish businesses operating in Afghanistan. Besides, basic problems of Turkish businesses in Afghanistan inflicted from special conditions of Afghanistan were also identified as another objective of the present study. Within the scope of these objectives, general characteristics of Turkish businesses operating in Kabul and Mazari Sharif towns of Afghanistan were determined and basic and management problems experienced by these businesses were investigated. According the research results, basic problems of Turkish businesses were gathered under 4 factors, namely as financial problems; security and infrastructure problems; economic, legal and technical problems; bureaucratic problems. The management problems of executives of Turkish businesses were also gathered under 4 groups as of problems related to planning function; problems related to controlling function; problems related to directing function and problems related to coordinating function of management.

Key Words: Afghanistan, Turkish Businesses, Management Problems, Basic Problems, International Business

INTRODUCTION

Rapid changes and developments throughout the world oriented businesses and organizations to make international and global productions. Businesses now are spending great efforts to be successful, to keep up with new competitive environment, to have low-cost and quality production, to determine consumer preferences on time and to gain a share in new markets. The organizations left behind relevant developments or not able to take place in globalized markets are not able to compete and survive. Therefore, management functions should be well-performed to improve business size, to distribute responsibilities, to follow technological developments, complex activities and developments in control and organizational management processes, to achieve anticipated profit and to have successful transitions to future periods and to have essential regulations of business administration.

The war environment experienced since 1978 has significantly destroyed the socio-economic structure of Afghanistan. The major cities and towns with great employment problems were also destroyed in this war environment. There was a quite weak infrastructure and there wasn't a central government to set economic policies. A banking system was not also available.

Existing commercial activities were going on beyond the national or international organizations. Following the annihilation of Taliban on 7 October 2001 by the US and UK forces (Büyükbaş, 2006, 120), UN organized a meeting in Bonn with the participation of Afghan political leaders. With the Bonn Treaty signed in this meeting, a new government was established and the doors of the country were opened to the world.

In this sense, following the annihilation of Taliban regime, Afghanistan adapted free market economy and took significant steps in creation of a regular budget of the country, preparation of National Development Draft for rebuilding and improvement strategies, preparation of National Development Budget, developing new reforms and programs in financial management system to regulate the recognition, report and inspection of all financial operations. Therefore, Afghanistan attracted the attentions of world nations and organizations from several countries initiated investments in different industries in Afghanistan. Turkish organizations are among these world organizations.

Turkish organizations have concentrated their investments in Afghan market since 2001 and Turkish investments mostly focused on construction industry. Despite the steps taken to draw investments to the country during the last two years, nation-wide security problems, bureaucratic barriers, bribery and legal structure have disquieted investors. Moving from this point and so on, the objective of the present study was set as to identify the management problems of Turkish organizations investing in different industries of Afghanistan and to identify their basic problems originated from inner and outer environments.

LITERATURE REVIEW

Management and Management Functions

Management is a business activity with others to reach a certain target (Ertürk, 2000, 6). According to another definition, it is to perform organizational activities, to produce goods and services or merchandising them by using physical, financial, and human and information resources of the organization (Genç, 2010, 17). In general, management is defined as a continuous process in which two or more people come together to realize and sustain a target and in which planning, organization, directing, coordination and controlling processes are efficiently implemented and operated (Öztekin, 2010, 18). Moving from the above definitions, management can briefly be defined as follows:

1. Management is a process.
2. Management is focused on objective-oriented activities.
3. Management is planning for proper decision-making on time and to reach desired outcomes.
4. Management is an efficient use of resources.
5. Management is an objective-oriented coordination activity for the individuals of the organization.

Management functions are handled by the first management scientist Henri Fayol as planning, organizing, directing, coordination and controlling.

Success of every business is totally dependent on efficient planning. Since specific objectives constitute the bases of management, the identification of these objectives and the ways to reach these objectives can only be determined through an efficient planning (Albayrak, 2005, 277).

Organizing is a management function and it is among the most significant ones. It is primarily related to physical activities like production of goods and services, division of the business into departments and individual-society relations. It encompasses the activities required to form the relevant structure for the realization of an objective (Buluç, 1996, 514). The structure created through planning and organizing processes should be activated along with the objectives of the business. This is done with the aid of directing function. Directing goes on as the organizational activity is going on. Directing is also called as command or execution and the objective of directing function is to provide efficient performance of the tasks assigned to employees (Tutar, 2010, 223). Coordinating is a function associating various parts of business with each other. It is a significant duty of executives since coordination allows the combination of efforts, time scheduling, sequencing of complementary activities to reach a common objective (Bahar, 2011, 190).

Controlling is the last and continuous function of management. Completion of management process is only possible with a successful control. With this function, whether or not the desired objectives were achieved or to what extent these objectives were achieved is determined. Controlling is a task performed whether or not the business activities were performed in accordance with accepted plans, given instructions and set principles (Mucuk, 2013, 171).

International Business

International businesses, among the most significant organizations in today's economic system, can be defined in different ways. For instance, international business is defined as corporations making production or commerce in one or more branch of activity not only within the nation but also in foreign countries (Ünsar, 2007, 696). According to another definition, international business is defined as an organization performing production functions and producing and marketing in different countries to provide additional profitability of the investment (Tağraf, 2002, 38).

International business activities can be divided into two categories. These are international trade and international investment (Aydın, 2007, 3). When an organization deals with import and export of goods and services, an international business then is realized. When an organization transfers its funds to a foreign country to carry out business activities, then international investment is realized. International investments can be implemented in different fashions such as an investment through a branch totally owned by itself, as a Joint Venture with a local organization, a license business, franchising activity or as a turn-key project (Koparal, 2012, 4).

Management Functions and Problems of International Businesses

Implementation of basic management functions in international organizations is possible with a handling of management functions in a general perspective. Planning, organizing, directing, coordination and controlling functions are provided through handling domestic and foreign activities in a general perspective (Özalp, 1986, 310).

Planning in International Businesses: Planning plays significant roles in every stage of international businesses (production, licensing, foreign production and etc.). Either being national or international, planning function is the key item for the success of management (Özalp, 1998, 112). Assessment of international opportunities and threats is the primary processes for international businesses to realize efficient planning activities (Atik, 2007, 52). Planning is a process in which activities required to achieve organizational objectives are identified. This process also includes information gathering activities of the businesses (Türker

and Örerler, 2004, 83). With this function, information gathered about the strategies and decisions designating the objectives and policies of the organizations. Planning in businesses is directing organizational activities of the businesses to defined and recognized objectives (Türker and Örerler, 2004, 83).

Planning in international businesses is the same as planning in national businesses. However, there may be some differences and complexities since foreign cultures, laws, taxes, life standards, business methods, relations to state may be quite different from one country to another (Mace, 1986, 160).

The plans made in international businesses should be comprehensive and flexible and take various factors into consideration. Planning should be performed by the executives of the parent company. There shouldn't be conflicts between the general plans and regional plans. Local plans are used for the success of general plans (Ünal, 2008, 37).

While preparing investment plans, international businesses usually invest in countries rich in raw material sources and in countries where labor costs are low and environmental legislations are flexible. Besides, international businesses carry out their activities in different countries through global networks. These businesses also plan their productions across the world (Atik, 2007, 54).

Organizing in International Businesses: Organizing is primarily related to physical activities like production of goods and services, separating the business into departments and individual-community relations and covers the activities to form a structure required to achieve a common objective requiring a common effort (Buluç, 1996, 514). International businesses tend to different organizations for better competition in international markets.

Organizing may create serious problems and conflicts even in parent country. The size of such conflicts may extend in international businesses.

International businesses have a planned approach while forming their organizations ranging from the management of executives of parent company to management of branches. Authority and responsibilities are identified from the board of management and general directors to lower orders. In operation of organization, initially decision-making process is implemented, then decisions are applied and finally control of activities is performed (Özalp, 1986, 136).

The factors effecting organizational structure of international businesses can be ordered as (Özalp, 1998, 137-140); growth rates of businesses, philosophy of executives, objectives of the business, relative significance of national and international activities, authority and responsibility of the business and the regions where the business is operated.

A business intended to operate in international markets initially has to carry out some investigations. In this way, the business may be able to well-comprehend the international opportunities. International operations usually have various factors and ambiguous future. Therefore, a well organization is required for profitable international operations and to minimize the risks in hand (Özalp, 1986, 139). A business operation in more than one national market needs to change its organizational structure not to experience organizational problems. International businesses deal with activities widespread over different geographies with different cultures, stuff, economic and political environments. Such conflicts are not seen in a business operating in a single market. The organization formed for a business operating in

national markets may not be sufficient or suitable for international businesses (Cuddy, 1986, 434).

An export branch may be an initial step to improve organizational structure of an international business when they started to exporting. Following an export branch, an international department may be opened. International businesses usually implement a functional organization, geography-based organization and product-based organization (Özalp, 1998, 169).

Directing in International Businesses: Executives of businesses dealing with international operations are faced with cultures of a foreign country or a foreign region. Therefore, they should try to understand the cultures of the countries in which they are operating, should comprehend the differences and similarities between the cultures and be sensitive to cultural differences (Atik, 2007, 60).

International businesses carry out their activities with executives from different national cultures. Despite their different cultures, they have the same perspective about the business and business relations. Executives of international businesses take similar steps like investing in promising markets and places, disposing of low-yield actives and acting rationally while creating business policies. Management of large and efficient companies today may present a cosmopolite nature. In this sense, cosmopolite sides of executives dominate. In international businesses, executives from various different parts of the world are gathered under the same roof. These executives also participate in managements under the roof of same company and have a voice in decisions (Tutar, 2000, 171).

A reality has been arisen which cannot be ignored by international businesses and countries. Together with internationalization, international differences have become dominant in international businesses. Management of cultural differences constitutes a key stone in reaching business objectives in multiple and dynamic competitive environment experienced with internationalization. The internationalization movements carry businesses from national to international dimension in one hand, require the management of individuals from different cultures on the other hand. Rapid adaptation to changes, attraction to different cultures and a common value-system play significant roles in reaching managerial success in international businesses (Atik, 2007,61). All these key issues can be implemented by executives with an international perspective and through developing local behaviors by taking the changes in each national market into consideration (Ehtiyar, 2003, 67).

Coordination in International Businesses: Coordination is the leading factor providing integrity and survival of the organization. It is an objective-oriented cooperation system and mechanism. It is to provide time scheduling, sequencing, interlocking and integration of activities. Through coordination, the executives synchronize business activities and the individuals performing these activities and keep group efforts along with a common objective (Örgev, 2008, 136).

Diversity of activities, the distance between the business units and different environmental factors influence the coordination function in international businesses. Business plans and policies are prepared by the executives of internal businesses. Executives are also responsible for coordinated performance of this plan and policies. Coordination of activities is a quite hard task in international businesses with quite much geographical distance from each other (Dinç, 2008, 70).

Since international activities are generally considered as extended type of national activities, the factors affecting the quantity and quality of the problems experienced in coordination can be ordered as follows (Dinç, 2008, 71):

1. Activity areas of multi-national businesses
2. Formal relations between head office and branches
3. Methods applied in selection of branch managers
4. Relative importance of national and international activities
5. Political and economic conditions of the countries where branches are located
6. Extend of responsibilities transferred to branch managers.

Controlling in International Businesses: Controlling is a quite complex process in international businesses since they are located within more than one cultural, economic, political and legal environment. The geographical distance between parent and subsidiary company, language burden, cultural differences and different perspectives may create insufficiencies in information required for controlling purposes. International businesses use various monitoring methods to control their subsidiary organizations. Frequent meetings and visits of parent company executives, subsidiary organization and regional directors and assignment of mother country citizen executives may be counted among the direct controls (Dereli, 2005, 66).

International businesses generally apply two control methods as of direct and indirect control. The primary characteristics of direct controls used by international businesses can be ordered as follows (Atik, 2007, 64):

- Face-to-face and regular meetings to keep up the activities,
- Visit to executives of subsidiary organizations to learn the existing problems from them,
- Paying special attention to qualifications of employees to be employed in abroad to turn direct control into autocontrol,
- Arranging organization structure as to act along with the directions of central administration.

In indirect controls on the other hand, monthly activity reports and every kind of information sent to central organization are used to control the activities of partner organizations (Atik, 2007, 64).

While performing controlling activities in international businesses, control factors like quality control, cost and budget control, feedback and reporting systems should be created. Besides, qualified stuff should be employed and control activities should be sustained in international level.

RESEARCH METHODOLOGY

Objective and Significance of Research

The research objective was to identify management problems of Turkish businesses operating in Afghanistan. New and rapid changes worldwide direct the companies to international and global productions. Businesses are trying to adapt themselves to new competitive environment, to make low-cost but quality productions, to identify consumer preferences on time and to get a share from these new markets. The ones left out of these developments or not able to globalize lose their changes of competition and survival. Considering from this perspective, management functions should be implemented in the best fashion to improve business size, distribute responsibilities, keep up with technological developments, overcome the complexities in activities, follow closely the development in control and organizational

management processes, gain the anticipated profit, have successful transition to future periods and to make the regulations designated by business administration. Therefore, the basic objective of the present study was set as to identify management problems of Turkish businesses investing in Afghanistan and to identify basic problems inflicting from inner and outer environments.

In line with these objectives, management problems of Turkish businesses operating in Kabul and Mazari Sharif provinces of Afghanistan and the other problems inflicting from outer environments were investigated. With this study, it is expected that the outcomes of the present case study would provide significant contributions to both management literature and managers in Afghanistan.

Economic conditions of Afghanistan were deteriorated with invasion of USSR in 1979 and subsequent civil war. With a quite weak infrastructure, there wasn't a central government to establish economic policies and even there wasn't a banking system. Current commercial activities were being implemented exclusive of national or international organizations.

Following the annihilation of Taliban by US and UK forces on 7 October 2001 (Büyükbaş, 2006, 120), UN held a meeting in Bonn at the end of November with the participation of Afghan political leaders. At the end of this meeting, Bonn treaty with the following articles was signed: A new government will be established; public resources will be used economically and efficiently along with the policies and targets set in development plans and programs (Freeblance, 2015, 3); a regular budget will be prepared; a National Development Draft will be prepared for rebuilding and improvement strategies; new reforms will be made in financial management system to regulate the preparation of a National Development Budget, to recognize, report and inspect all the financial operations (Deik, 2011, 2-3).

With the Bonn Treaty signed in 2001, doors of the country were opened to world and a central government was established. In this way, Afghanistan attracted the attentions of world countries and several countries initiated investments in different industries of Afghanistan. Turkish organizations are also among these businesses.

The present research is significant in that Turkish businesses investing in different industries of Afghanistan would have a chance to see their management problems and they would also see the basic problems inflicting from internal and external environments. Close and intensive relationships between Afghanistan and Turkey are also found to be significant for this study. The present study is also significant in that current outcomes would bring light into future activities of business owners, entrepreneurs, managers, in general business world, in Afghanistan.

Research Universe

Executives of Turkish businesses operating in Afghanistan constituted the universe of the present research. According to information supplied from AISA and Turkish Embassy, there are around 180 Turkish companies operating in Afghanistan. However in present study, the capital city Kabul and Mazari Sharif provinces with developed industry and where Turkish businesses are intensely populated were selected. There are about 160 Turkish businesses operating in these two provinces. Within the scope of the present research, questionnaires were applied to 73 of them with face-to-face interviews. Also, questionnaires were sent to 80 businesses through e-mails, but only 18 responds were received. So, of 153 questionnaires sent to Turkish businesses, 91 responds were found to be assessable. All of these 91 questionnaires were subjected to assessments.

Data Gathering and Analysis Methods

The research data was gathered through questionnaires. The questionnaires were applied to company executives. Questionnaire forms were composed of three main sections. The first section questions the demographic characteristics of executives. The second section questions the general characteristics of the businesses. The third section is composed of two parts. The first part is composed of 22 statements (gathered from the studies of Aisa (2013), Barak (2011), Zengin and Canbolat (2009)) to identify the basic problems of Turkish businesses in Afghanistan. The second part is composed of 27 statements to identify the management problems of the businesses. The statements about management problems of the businesses were gathered from the scale developed and used by Kağızman (2008). The participant agreements with the statements were assessed through 5-point likert scale. In this scale: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. Reliability coefficient of the scale for management problems was identified as Cronbach Alpha= 0.828; reliability coefficient of the scale for basic problems was identified as Cronbach Alpha= 0.815. The questionnaires were applied either with face-to-face interviews or through e-mail. Business executives/authority were also called and e-mailed to increase respond rates. Of 153 questionnaires sent to Turkish businesses, 91 responds were received and assessed. Questionnaire respond rate was calculated as 56.87%.

Research Findings

Results of Factor Analysis about Basic Problems of Turkish Businesses in Afghanistan

The scale used to identify basic problems of Turkish businesses in Afghanistan was composed of 22 statements. As a result of factor analysis, double-headed 10 statements with quite low variance (0.40) were omitted from the analysis. Then, the basic problems of Turkish businesses were gathered under 4 factors (12 statements). The total explained variance was identified as 0.694. These factors were named as financial problems; security and infrastructure problems; economic, legal and technical problems; bureaucratic problems. The factor analysis results about the basic problems of Turkish businesses in Afghanistan are provided in Table 1.

Table 1: Factor Analysis for Basic Problems of Turkish Businesses in Afghanistan

Factors	Variance Percentage	Cronbach Alpha	Factor Loads
Factor 1: Financial problems	30.243	0.798	
Lack of state incentives			0.832
Lack of financial resources			0.795
Insufficient equity of businesses			0.779
Factor 2: Security and infrastructure problems	16.24	0.706	
Qualified labor problems, lack of qualified stuff			0.834
Lack of intermediate goods, material sub-industry, undeveloped sub-industry and resultant increased costs			0.764
Security problems			0.679
Factor 3: Economic, legal and technical problems	16.236	0.655	
Lack of maintenance-repair services, lack of technical service infrastructure			0.800
Collection problems and problems in collection of credited receivable			0.738
Complex legal regulations, structural problems, legal insufficiencies			0.684
Factor 4: Bureaucratic problems	14.701	0.782	
Lack of attention on embassy stuff, non-appropriation of entrepreneurs			0.906
Difficulties in passport registration and visas and different implementations			0.844
Corruptions and bribery in public sector, unofficial pressures exerted by official institutions.			0.721
	69.354	$\alpha^2=0.805$	

KMO=0.776 Explained Variance: 69.354; p>0.00, Note: Subjected to 7 iterations. Sig=0.00

Considering the basic problems of Turkish businesses in Afghanistan, it was observed that executives consider security problems, lack of sub-goods and material industry, undeveloped sub-industry and resultant increased costs as serious problems. Besides, lack of financial resources, lack of state incentives, qualified labor problems, complex legislations and resultant legal insufficiencies also negatively influence business activities. On the other hand, corruptions and bribery in public sector, unofficial pressures of official institutions and collection problems are also considered as quite significant problems by several executives.

Results of Factor Analysis about Management Problems of Turkish Businesses in Afghanistan

The scale used to identify management problems was composed of 27 statements. Four factors were identified in the first factor analysis, but double-headed ones were omitted. Then, 4 factors were identified from 14 statements in the subsequent analysis. These factors were named as problems related to planning function; problems related to controlling function; problems related to directing function; problems related to coordinating function of management. Reliability of the scale used to measure management problems and factor analysis results are provided in Table 2.

Table 2: Factor Analysis for Management Problems of Turkish Businesses in Afghanistan

Factors	Variance Percentage	Cronbach Alpha	Factor Loads
Factor 1: Problems related to planning function	30.152	0.799	
A detailed planning is not performed during the establishment (investment) phase of the business			0.792
Management is not carried out by professional executives			0.769
In planning, scientific principles are not applied to determine the best choice among the alternatives			0.700
A planning is not performed through pre-determination of what, why, when, where, who will perform an activity with which resource and cost			0.697
Alternative plans are not developed while making the planning			0.656
Factor 2: Problems related to controlling function	14.747	0.781	
An efficient communication system able to transfer actual outcomes to relevant unit fully and ontime is not available			0.840
An efficient recording systems able to determine the actual outcomes properly and ontime is not available			0.818
Business activities are not regularly followed up			0.632
The standards used in controlling activities are not sufficiently developed			0.623
Factor 3: Problems related to directing function	10.568	0.722	
Misunderstandings arise because of unclear and uncertain order and directions			0.812
Orders are not kept up			0.719
Oral and written orders do not comply with each other			0.685
Factor 4: Problems related to coordination	9.039	0.661	
A coordination through direct meetings among individuals responsible for business activities is not available			0.855
Activities to be realized are not performed in a sequential and complementary fashion			0.817
	64.506	$\alpha^2=0.792$	

KMO=0.751 Explained Variance: 64.506; p>0.00, Note: Subjected to 7 iterations.

Factors loads for variables corresponding to each factor are provided in Table 2. In table, number of variables representing each factor was ordered in a descending order. Cronbach Alpha coefficients of 4 factors varied between $0.66 < \alpha < 0.799$. These values indicated the reliability of the scale used in factor analysis (Nunnally, 1978, 245).

Characteristics of Executives and Difference Tests on Perceived Management Problems

According to t-test and ANOVA test, a significant difference was not identified in perceived management problems by executives based on their genders and ages, but significant differences were observed based on their educational levels and positions in their organizations (Table 3 and 4).

Table3: ANOVA table for Perceived Management Problems of Executives based on their Educational Level

Management Functions	Level of Education	Mean	Standard Deviation	F	Sig
Planning	Primary School	3.667	0.305	3.908	0.011
	High School	2.633	0.517		
	Undergraduate	2.498	0.727		
	Graduate	2.025	0.970		
Controlling	Primary School	2.916	1.010	2.514	0.064
	High School	2.312	0.622		
	Undergraduate	2.573	0.730		
	Graduate	1.937	0.563		
Directing	Primary School	2.889	0.962	2.922	0.038
	High School	2.027	0.658		
	Undergraduate	2.240	0.633		
	Graduate	1.750	0.427		
Coordination	Primary School	3.500	0.500	1.120	0.345
	High School	2.583	0.557		
	Undergraduate	2.860	0.863		
	Graduate	3.062	1.208		

An ANOVA test was performed to see if there is a difference in management functions of executives based on their educational level. While there was a significant difference between educational levels of executives and planning and directing functions, there were not any significant differences between educational levels of executives and controlling and coordination functions. Analysis results revealed that primary school graduated executives placed less emphasis on planning and directing functions and the executive with graduate level education placed more emphasis on these functions.

An ANOVA test was performed to see if there is a significant difference in management functions based on position of executives (Table 4). There were significant differences in management functions of executives at different positions. Business owners placed less emphasis on planning function.

Table4: ANOVA table for Executive Emphasis Placed on Perceived Management Problems based on their Positions

Management Functions	Position of Executive	Mean	Standard Deviation	F	Sig
Planning	Business Owner	2.933	0.847	4.312	0.003
	General Director	2.561	0.731		
	Vice Director	2.276	0.519		
	International Branch Director	2.400			
	Other	2.185	0.608		
Controlling	Business Owner	2.590	0.921	0.719	0.581
	General Director	2.560	0.646		

	Vice Director	2.596	0.875		
	International Branch Director	2.000			
	Other	2.322	0.475		
Directing	Business Owner	2.321	0.734	1.916	0.115
	General Director	2.320	0.763		
	Vice Director	1.843	0.350		
	International Branch Director	1.333			
	Other	2.152	0.525		
Coordination	Business Owner	2.871	0.909	0.519	0.722
	General Director	3.071	0.855		
	Vice Director	2.690	0.879		
	International Branch Director	3.000			
	Other	2.763	0.833		

CONCLUSION AND RECOMMENDATIONS

Ever-changing environmental conditions and increasing competition greatly influence the activities of businesses. Businesses operating in a global market should implement management functions in the best fashion to reach pre-determined targets, to survive in these markets, to improve efficiency and productivity, to keep up with internal and external market operations and to have successful transition into future periods. In this sense, the objective of the present research was set as to determine management problems of Turkish businesses operating and investing in Afghanistan. Besides, basic problems inflicted from special internal and external constraints of Afghanistan were also identified.

The Turkish businesses in Afghanistan usually invested in construction, furniture and accessories, education, restaurant, contract-trade, logistics, electricity and heating devices.

Basically two subject matters were focused on in this study. The first one is to identify the management problems of Turkish businesses investing in different industries of Afghanistan and the second one is to put forth the basic problems inflicting from internal and external environments. Analyses were performed to identify these problems and significant outcomes were achieved about current problems.

A factor analysis was performed to group the basic problems of Turkish businesses in Afghanistan. According to analysis, basic problems of Turkish businesses were gathered under four groups as of financial problems; security and infrastructure problems; economic, legal and technical problems; bureaucratic problems. Considering the factor loads, it was observed that "financial problems" was seen as the most significant problem by Turkish businesses in Afghanistan.

Current findings comply with the results of Nastoh (2015) investigating BASEL implementations and their effects in banking operations. It was indicated in that study that political instability and management changes created nation-wide financial problems.

"Security and infrastructure problems" was another factor. The variable of the factor with the greatest value was qualified labor problem and lack of qualified staff. Therefore, investor organizations exhibited a polycentric approach and brought executives from their parent country. To overcome this problem, Afghan Embassy issues visas easily and do not present any burdens in bringing foreign workers to Afghanistan. Also, Afghan government warrants that they will provide cost advantage and increase security so much as they employ Afghan workers (Boğaziçi, 2007, 27). However, lack of trained labor is still a primary problem.

“Economic, legal and technical problems” are the third factor perceived by Turkish businesses. The variables contributed to this factor were mainly arisen from legal loopholes and lack of technical structure.

Current findings on this factor comply with the results of Wasil (2015) investigating Afghan economy and economic integrations. It was indicated in that research that besides insufficient security, infrastructure was destroyed seriously throughout out long-lasting war years and therefore foreign investors were not attracted in investing in Afghanistan and various economic problems were experienced in the country.

“Bureaucratic problems” were considered as the forth basic problem of Turkish businesses in Afghanistan. Bureaucratic burdens or the difficulties experienced in bureaucracy were perceived as a problem.

With regard to basic problems of Turkish businesses in Afghanistan, security problems, lack of sub-goods and material industry, undeveloped sub-industry and resultant increased costs were considered as serious problems. Beside these problems, insufficient financial resources, lack of state incentives, qualified labor problems, complex legislations and resultant legal insufficiencies also negatively influence the activities of businesses. On the other hand, corruptions and bribery in public sector, unofficial pressures of official institutions and collection problems are also considered as quite significant problems by several executives.

A factor analysis was performed to group management problems of Turkish businesses in Afghanistan. As a result of the analysis, 4 factors were identified and they were able to explain 64.506% of total variance. These factors were named as the problems related to planning, directing, controlling and coordination functions.

With regard to factor loads, it was observed that “the problems related to planning function” formed another factor. Planning is a process. This process is known as information gathering process of management and starts with a task, that is to say, a mission statement. Organizational mission indicates the existence reasons of the organization and designates the goods and services to be produced, customers and organizational values (Can, 2005, 87). Planning is the identification of what will be performed when, where, why and by whom. Considering the planning problems of the businesses, it was observed that businesses did not make plans sufficiently during the investment phase, did not develop alternative plans throughout the process constituting the bases for their activities and did not use scientific principles while finding out the best choice among the alternative plans.

“The problems related to controlling function” was perceived as the second factor by the executives. Controlling is considered as one of the strategic way of solving current problem or preventing them before they emerge (Taşkın, 2013, 294). Unavailability of an efficient communication system able to transfer actual outcomes to relevant unit fully and ontime, inefficiency of recoding systems able to determine the actual outcomes properly and ontime, irregular follow up of business activities and insufficient standards used in controlling activities were identified as the problems related to controlling function of businesses. Such problems may directly or indirectly influence the efficient operation and success of the business.

“The problems related to directing function” was considered as the third factor by the executives of Turkish businesses in Afghanistan. Directing designates continuous decision-

making through specific or general orders or directives (Efil, 2010, 155). The directing function targets the issues like successful achievement of objectives, motivation of employees, a well leadership of the manager, efficient communication systems within the organization, assigning rational task and authorities to employees based on their experience and capabilities. The problems related to directing function were identified as incompliance between oral and written orders, unviability of mutual information, data and idea exchange between the tasks to be done and the stuff to do these tasks, non-follow up of orders.

“The problems related to coordination function” was identified as the factor. Coordination mainly is a function of senior executives. The coordination problems were mainly resulted from deficiencies in combining, time scheduling and sequencing of activities and complementing each other (Taşkın, 2013, 270). There was a compliance problem between the business and the employees.

The t-test and ANOVA results revealed that gender and age of executives did not have significant effects on perceived management problems, but their educational levels and positions in organization had significant effects on perceived management problems.

An ANOVA test was performed to see if there is a significant difference in management functions of executives based on their educational levels. Test results revealed significant differences between educational level and planning and directing functions, but insignificant differences were observed between educational level and controlling and coordinating functions. While primary school-graduated managers placed less emphasis on planning and directing functions, the executives with graduate level education placed more emphasis on these two functions.

An ANOVA test was also performed to check if there is a significant difference in management functions of executives based on their position within the organization. There were significant differences in planning function of executives based on their position. Business owners placed less emphasis on planning functions.

As to conclude, it can be stated that the problems related to management functions of Turkish businesses in Afghanistan were influenced by close or further environment of the businesses. Financial problems of Afghanistan, security and infrastructure problems, economic, legal and technical problems, bureaucratic problems, lack of state incentives, insufficient sub-goods and material industry, undeveloped sub-industry, lack of qualified labor, corruption and bribery in public sector, unofficial pressure of official institutions, insufficiency of organizations in motivating their executives all influenced the performance of Turkish businesses and made difficult to focus on their own business and to propose solutions for current problems. To overcome these problems, central coordination organization should be well managed, security and infrastructure problems should be eliminated, corruptions and bribery in public sector and unofficial pressures of official institutions should be prevented, sub-industry should be developed, state incentives and credits should be supplied. Besides, further research should be carried out on business administration and management functions.

Along with these conclusions, following recommendations were developed about the problems of Turkish businesses operating in Afghanistan:

- The executives of Turkish businesses in Afghanistan should improve their knowledge and experience on planning, program development and controlling issues and all activities should be performed along with a plan.

- Internal and external environmental constraints like infrastructure, raw material, energy, qualified labor and technology should be taken into consideration and organizational structure should be formed.
- Along with the objectives, corporation, communication and coordination among the employees should be developed.
- Activities, outcomes and implementation reports should be subjected to internal and external audits and a tool improving efficiency and productivity should be used.
- Regular surveys should be carried out within the organization to identify potential sources of management problems of Turkish businesses in Afghanistan and improvements should be made based on survey results.

Only a situation assessment was performed in this study. In further studies, the effects of problems indicated in present study may be investigated and detailed investigations about each one of management functions can be carried out for Turkish businesses investing in Afghanistan.

The present outcomes may have significant contributions to management literature. There were not any studies on this issue carried out in Turkey and Afghanistan. Therefore, such a case increased the significance of present situation assessment. It should be kept in mind that there is a need for further studies to generalize the current outcomes. It was thought that the information gathered through focusing on this issue will be quite beneficial for executives and other researchers.

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Academic Publication and Issues of the Day: U.S. Income Tax Paradigm

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Abstract

As academic researchers and American citizens during a most tempestuous Presidential election we have often been struck by the misinformation and misunderstanding of many of the issues of the day. It seems that the electorate world-wide are rationally ignorant and lazy and we in the academy do little to change that or even to represent a healthier paradigm. Perhaps it is because “it takes a lot of time to track down, organize, and analyze the data to answer even one small question well (p. 2). . . . [And, moreover,] When people don’t pay the true cost of something [or cannot understand the real costs], they tend to consume it inefficiently (p. 15). . . . [Finally,] if you ask the wrong question, you are almost guaranteed to get the wrong answer (p. 49).” These are the words of famed Freakonomics authors Levitt and Dubner in their latest work, *Think like a Freak: How to Think Smarter about Almost Everything*, (2014). In that work Levitt and Dubner challenge all of us, especially those of us that claim to be facilitating others toward a more effective life-time of work and contribution, to think more clearly toward developing real solutions for pressing issues. Those quotes lead us to the question of how does a “Freak” think? They think like a genuinely curious kid noticing new facts and views with few assumptions and expectations without overthinking: open to the obvious and the totally unexpected and everything in-between! With these thoughts in mind, the overall goal of this research is to produce an academic and practical exemplar starting point for U.S. Tax Code enhancements that could possibly be applied to world-wide tax policies (Aredy, 2015; Service and Loudon, 2013 and 2015; and Service, Loudon and Kariuki, 2014). Moreover, while developing our “straw-man” proposal we are demonstrating a “scholastic inquiry” being applied to developing a usefully suggested solutions for a contemporary and very important issues. We start with underlying assumptions that U.S. Federal Income Tax (FIT) as any governmental policy 1) must be understandable, 2) require no paid intermediaries, and 3) facilitate “automatic” evaluation of impacts for new governmental spending and financing proposals. This research should present a deep analysis of the how, who, why and what for addressing contemporary conundrums.

INTRODUCTION

As you read this research realize that we are building on years of research into human nature, accounting, markets, politics, tax law, managing, leading, innovating and thinking to derive at a suggestion about how to modify one of the most complex systems in history. We do not take research lightly and have used every single angle or piece of useful information to come to a workable American FIT that will stand the test of time; suggestions that could be a model for world-wide income tax reform. Moreover, we would like the readers to understand that the

first author, unlike the second author, is not an accountant. We feel this combination of views gives this paper a more comprehensive application for “if only the insiders are considered competent to make critical comments about the subject, then the criticisms are likely to limited to relatively technical issues, some of the broader aspects of criticism being, no doubt, significantly neglected (Penrose, 2016: p. 1).” Bear with us as the how and why of going over so many different sources from such varied disciplines eventually results in relatively simple suggestions: often the most difficult solutions are too simple to see.

We start this manuscript with a challenging abrupt statement that the U.S. FIT systems are massive political frauds embedded with years of failed manipulations that have caused negatively productive transfers of wealth, wasted human intellect, misguided financial decisions, reduced economic growth and more. The convoluted huge amount of code in U.S. income tax laws make it impossible to evaluate impacts of changes insuring that the FIT remains a tool for extraordinarily destructive voter manipulations and influence pedaling. Politicians that do not understand this either lack the intellect or honesty necessary to serve in our complex society. Here we forward the notion that FIT’s deeply systematic detrimental impacts can only be changed by admitting the depth of the problems, reassessment, reanalysis, repurposing and totally replacing FIT systems. We have arrived at our currently untenable FIT out of incremental rational ignorance, in part because it was to the advantage of our political leaders and those that profiting from FIT transfers; and because we prefer letting others think for us. Remaining in that quagmire is totally a choice and one we feel American can ill afford to continue. The 2016 American national elections are making citizens acutely aware of the need to understand what political proposals will cost. As thinking people know, free college tuition, covering preexisting health conditions, upgrading infrastructure, minimum wage increases and adding regulations as well as tax code changes in deductions, categories of income and so on, all have costs. Further, everyone should realize they will share in any costs whether directly or indirectly, regardless of the spin of politicians who want to make us believe someone else will pay. For example, as simple as it sounds, the minimum wage earners will pay the highest proportional costs for increases in minimum wage in the form of lost jobs and higher prices. An increase in the minimum wage only benefits those wage earners who are able to keep their jobs and don’t have to spend their increase simply on higher prices for current necessities!

This manuscript submits that we start more often using the reality of academia publish or perish to address major issues of the day in order to develop innovative solutions which can be further evaluated as points of reference (Angrist and Pischke, 2009; and Service and Loudon’s call, 2015). Recently famed international rock star, Bono, said America has big ideas, that American is a big idea, and that the world needs big ideas from America. We challenge American University educators to put some of its brain power toward addressing major issues of our time; and if taxes and taxation are not critical issues in the time of worldwide runaway debits and deficits, there are no major issues. “Everybody is in favor of tax reform, and certainly at least corporate tax reform, but it never happens (Seib, p. B6: 2016).” And, in forging a new FIT system, “Almost everything has to go right and a million things can go wrong (“Years of Turmoil Forged Tax Plan,” 2016: p. A2).

Research Questions

The following research questions will be answered under a foundation of the relevant literature and Tax Code: How to evaluate current research and clarify thinking toward a useful and necessary objective? How can we more clearly define the U.S. Tax Code’s current uses and objective and underlying assumptions? What do the U.S. Federal Income Tax (FIT) Code objectives need to be and what are the underlying associated assumptions? What would a tax

code that meets identified objectives under the correct assumptions entail? How this new FIT allows clarity in evaluation of new proposals and their costs?

Objectives of a Federal Income Tax System

We start by backing up to the enlighten thinker and father of modern economics and the most successful economic system in history, Adam Smith, in order to clarify guiding principles for taxation (Ashton, 1969; Butler, 2007; Leighton and Lopez, 2013; and Smith, 1779). Smith's axioms on taxes include 1) ability to pay, 2) certainty, 3) convenience, and 4) efficiency (Creedy, 2009 and Smith, 1776). These fundamental assumptions and objectives have changed little over time. In the current U.S. Tax Code, only the ability to pay can be found (Butler, 2007). This needs to be rectified. Any derived approach must stress simplification and meeting all of Smith's principles as a bare minimum base. A review of the more academic literature, finds much complexity in the taxation arena related to formulation for equity, efficiency, stability, sufficiency and social and economic justice. Leaving one to conclude that taxation must be simplified to be understandable and understood by those that must calculate and pay taxes; and all who need to evaluate governmental proposals for spending or revenue. It is widely understood by anyone studying the topic that the complexity in federal income taxation is a political ploy that has gone madly awry, to put it in straight forward normal speak (the murky mess of Tax Code and more is made crudely clear in Sorkin, 2009). Citizens in an open and free society must be in charge and continually fight toward the needs of the population as a whole not the need to pander and buy votes to insure reelection (Service and Loudon, 2013). There is simply only one explanation for not changing the existing system as it plays out in practice. That purpose has to be to confuse the taxpayers so that the "confuser" can profit (votes and dollars) from the mess.

We started to get into the research on modern 'complexity,' and chaos theories, equilibrium models, role of confidence, bartering, symptoms versus causes, political corruption and cronyism, constrained versus open systems, golds standards, and more. But, we did not in a large part because of the probabilistic versus deterministic nature of our current FIT. The absoluteness and simplicity of our proposed FIT makes most of these mentioned issue of no concern. Let us go back from this brief aside which was added to let you know we considered all we could find related to our chief aim of revamping FIT. But first, recall that in theory there is no difference in practice and theory, but in practice there is.

Into this mix of the extant literature related to taxes, we will add innovation thoughts and guidelines as well as demonstrate strategic innovation through our solid tax proposals. A guiding principle will be a point of strategy that needs to be the norm. That is to start with what you want and need to accomplish stated as objectives noting underlying assumptions. Do not start with what you have for if what you have is the best it will raise to the surface (Kane, et al, 2015; and Service and McEwen, 2015). Yes, status quo needs the same evaluative criteria as other alternatives: neither more nor less.

As academic professors, researchers, consultants and writers, the current authors have the depth of experience and education to look at the complex terms of economics and the statistics footings related to elasticity, substitution, indifference, utility, social welfare, social workfare, optimal, fundamental, choice, demand curves, incentives, behavioral psychology, expenditures, collections, destabilization, deductions, write-offs, alternative minimums, activity inducements, sur-taxes, productivity, avoidance behaviors, weighted alternatives, marginal and effective rates, burden shifting, supply-side, moderator and mediator effects, mitigated, sensitivity, offsets, Keynesian Macroeconomics theory, delay incentives, phase-outs, caps, hidden-cost or

benefits, significance contemporary, idiosyncrasies of . . . , aggregate demand, supply side, fiscal stimuli, consumption spending, transfer spending, multiple effects, lump sum, fixed, variable, automatic, buffer, countercyclical and cyclical, stealth tax, lean or robust, efficiency, simplicity, locational, secure, insecure, transparency, trust and distrust, gross and net, pre-tax, after tax, treatment, fostering, encouraging, social engineering,, supportable, securitization, devaluations, derivatives Enough! Get the picture? This obscenely long list of tools, terms, theories and approaches is almost unlimited. When we try to meet all social and economic criteria imaginable with FIT, we simply meet no determinable criteria (Walters, 2013). And, when statistics are involved remember, “Regression analysis and correlation, so beloved by finance quants and economists, are ineffective for navigating the risks ahead (Richards, 2014: p. 4).”

A new FIT must move away from the complications caused by the combination and permutation of millions of words of Tax Code coupled with economic, social and psychological considerations in tax policy development and tax impact calculations. All of these aspects taken together show that it is basically impossible to determine the ramifications of taxation; neither determination of impact on collections or behavior is possible without simplifying the code. In a democracy the impact on taxes (rates, collections and deficits) of proposed changes need to be easily assessable by normal voters, not just by highly trained economic specialists. There are economic and social dangers in an unintelligible FIT. Those issues result in lost or misplaced opportunity costs and can result in a discontented electorate which can lead to distorted elections as seen in the 2016 U.S. Presidential election. The following principle should be understood when formulating a new FIT: “Stronger, broadly shared economic growth would drain some of the anger from many issues dividing voters today (Ip, 2016: A2).”

To get to the point that taxing implications or amounts can be determined for new or different governmental programs, we first meet Adam Smith’s criteria and then meet the following guidelines for FIT be it individual or business taxation.

Real reasons and assumptions, are a starting point

It seems blatantly obvious, but apparently is not, that collecting the funds necessary to finance government should be “The” sole overriding FIT purpose. Attempts to modify behavior or solve social ills through FIT have not only failed, but very often have the opposite of the desired effect. Yet, we keep trying, insanely adding more complexity. The most often destructive outcomes are due to unintended consequences added into a giant convoluted FIT. When we attempt to go beyond procuring the funds necessary to run the government at a level decided by the electorate, the issues revolve around who defines what is needed and how the incentives and disincentives will work when implemented into the Tax Code? When assumptions of taxation go beyond revenue collection into behavioral modification and are added to the thousands upon thousands of existing FIT rules and policies; it is no wonder that muddled consequences which cannot be determined with any degree of accuracy will occur. The following objectives should be behind a FIT system with “The” assumption of collecting funds while being simplistically understandable by FIT payers. The objectives of and assumptions behind FIT need to become:

1. De-politicizing code to ensure that votes and favoritism cannot be bought.
2. Adding absolute certainty to paying and collecting taxes.
3. Simplifying compliance; the only variable criteria being the income or ‘revenue’ reported.
4. Eliminating most of the IRS. Keeping only enough staff to process collections. Have no IRS decisions on anything beyond, “did they report their income/revenue correctly?”

5. Being understandable by anyone who has a U.S. elementary education.
6. Being truthful in all aspects of who gets taxed and how: we all pay when one pays and making believe otherwise is dishonest at best.
7. Removing all FIT considerations from financial choices: individual or organizational.
8. Eliminating the need for hired intermediaries to calculate and change tax obligation.
9. Putting tax lobbyist out of business.
10. 10 Abolishing the guilty until proven innocence assumptions behind current Tax Code and IRS operations.
11. Ending attempts at social engineering.
12. Ending using taxes for social justice.
13. Ending unintended consequences of changes.
14. Equalizing every tax payer by removing statuses and categories.
15. Eliminating all deductions.
16. Making personal income tax the most understandable and desirable in the world.
17. Making organizational FIT globally the most competitive: encourages all companies to come to American not leave it.
18. Equalizing absolutely all tax payments on all segments of income.
19. Differentiate only by income for individuals and gross revenue/receipts for organizations.

Remember, even clean air is nowhere near free. Shifting costs to others, for example “the rich,” or “Wall Street” burdens an economy largely by removing monies from more productive market uses. This shifting costs everyone in a society including the poorest among us through reduced economic grow and higher prices. Every person in America with any social security, retirement income, welfare benefits, investments and a job or not, should realize that their future payouts and current salaries “all” (even professors at private Universities) are tied to Wall Street and the economic wellbeing of our society. Reduce corporate profitability and you reduce your payouts now and in the future. In sum, multiplier effects can only be calculated by subtracting out results of alternative uses monies would have had if they not been removed from an economy in addition to the costs of redistributing procured funds via the FIT.

LITERATURE AND USEFULNESS

The more complex the system the more interdependencies that exists and the more difficult it is to calculate impacts to citizens and government. We see clearly that the American income tax system has gone way beyond the collection of monies for financing government. The current federal income tax (FIT) code attempts to deliver economic and social “justice” and stimulate the economy by encouraging or discouraging financially related behavior. When in reality FIT is a well packaged complex bundle of tax “benefits” to make voters believe they are getting something for nothing: a fool the citizens approach at best. These aims are chiefly met by providing different categorizes of incomes and filing statuses, shifting burdens to “others,” and “providing” exclusions and deductions. We cite no sources here since resulting difficulties of the current FIT are literally undisputable. As we will demonstrate as we go along, any laudable aims of the current FIT have been totally undermined by facts and convoluted unintended consequences.

Income tax can be used for legitimate expenses for services or goods necessary to running a government, such as the military, tax collectors, infrastructure and perhaps even the arts. Taxes can also be used for all forms of transfer payments (Creedy, 2009). One form is “workfare” in the form of earned income credits designed to incent and hopefully encourage lower income workers to work rather than attempt to live off more direct welfare payments.

America's largest transfer payment system, Social Security, is a standalone system that is somewhat of an actuarial system that takes in money while people work so that it can be paid back to them later in life or when they become no longer able to work. Unfortunately, Social Security is more of a Ponzi scheme made worse by excess funds being used in running the government and then being replaced by debt IOUs. For purposes of simplification Social Security as a specific topic is not being included in this research; and the earned income credit welfare system will be given only slight mention with no detailed solutions proposed.

As far as the differing categories and types of income and deduction, one does not have to look hard to see some of the ramifications of a tax policy designed to manipulate behavior. The housing crisis and banking crisis of the past few years shows clearly that unintended consequences are always hard at work to disrupt the best laid plans of monkeys and crooks (maybe this should be politicians?). Supporting these suppositions, Smiley and Keehn (1995) provide a great overview of the original intent of income tax and how that has gone crazy at best. The attempt to take a large portion of wealth from the superrich led to the need to address tax avoidance and the need to move beyond the top 2% to broaden the tax base. These attempts to trick the taxpayers began the follies of complexity in our FIT systems.

Listokin (2012) in his macroeconomic analysis of the effects of our current income tax system does an excellent job, though apparently unknown to him, of demonstrating the complexity of the interactions of an overblown code in a 50 page onslaught of economic mumbo speak. Listokin covers much of the impact of governments attempt to stimulate the economy via tax manipulation and the destabilizing as well as stabilizing aspects of FIT policy. No point is more well placed for use here than the discussion of deductions as "tax expenditures. . . Costing approximately \$1 trillion per year (p. 89). [These comments alone tell us how far we have come when we determine that allowing people to keep more of the money they have earned costs the government just as does any other expenditure.] Even as the federal government has attempted to stabilize the economy with fiscal stimulus, many of its longstanding tax policies have had precisely the opposite effect (p. 47). . . . [Perhaps this is due to the fact that] Legions of tax provisions have been carefully parsed (p. 48). . . . While no paper could canvas the entire Tax Code. . . . In many cases, the Tax Code's idiosyncrasies have a strongly destabilizing effect on the economy (p. 49). . . . Approximately \$1 trillion . . . is "spent" annually through the Tax Code to encourage activities such as homeownership, retirement savings, and charitable giving (50). . . . Tax expenditures account for approximately 7% of GDP. This figure is of comparable magnitude to the individual income tax, which collects approximately 8% of GDP (p. 84-85). . . . The impact of a tax cut or tax expenditure can reverberate through the economy (p. 51).

All of this is somewhat purposefully taken out of context, but the point the current authors are trying to make is that with an overly complex FIT system the impact of "tweaking" Tax Code to lead to a given behavior is foolishness exemplified. Short, intermediate and long term effects be they benefits or harm simply cannot be determined: "different provisions have different effects (p. 63)." These citations point to the artificiality of the Tax Code related to encouraging individual and business spending: income level determines spending be it on a home, charitable giving or new equipment —if "they" keep more "they" will spend more.

A countries and global economic growth is the best, and arguably the only sustainable, tool for lifting economies and expanding opportunities (Banerjee and Duflo, 2011and Colino, et al, 2014). Economically useful innovations expand economies and improve productivity; nothing else does! Those innovations are all paid for with dollars that are left over after basic needs are meet; reduce the leftovers, and you hamper growth and innovation to some degree at some

point. And, as America continues to lead the world in creating billionaires, the income and wealth gaps will widen: is this a good thing or bad?

Relatedly, one problem being touted in the American press is the growing gap between the rich and poor in America: significantly the gap between the top 1% and poorest among us is the focus. The apparent attempt is to make people think that the rich get richer at the expense of the poor; nothing could be further from reality. To this point we see a very misleading story (nothing new here) about this gap from politicians and the press alike, for “a growing body of evidence suggests the economic expansion since the 2007-2009 financial crisis has enriched a much larger swath of the upper middle class, and that a deeper income divide is developing between the top quarter or so of the population and everyone else.” Upper middle class was defined as earning between \$100-350,000 for a family of three, at least double the U.S. median and about five times the poverty level. Much of the shift in the middle class was caused by people moving into these upper income levels not moving down. “The Pew Research Center last month found 203 metropolitan areas have seen their middle class shrink, but in 172 of those cities, the shrinkage was in part due to the growth in wealthier families. In 160 of the cities, the share of lower income families grew as well” (Zumbrun, 2016a: A2; also see Zumbrun, 2016b; Mitchell, 2016; and Ridley, 2016 for more proof of dishonest rhetoric about economics and taxation). More about this gap later.

Introductory Comments-tax laws are at the core of economic shifts

We start this research with a warning that should be supplied with all academia articles. News flash, we are biased, yes, it's true. All humans are biased and we are human regardless of what some of our students might say. We see social engineering in all aspects of life from the once nebulously fun Facebook to the now possible most culture leading tool in the world. We see news media that is no longer news but views keeping us in our 'rational ignorance' (Service and Loudon, 2015). So what?

As Gardner rightly proclaimed, “Competition is at the heart of American’s economic success. . . . there are already plenty of ways to promote job growth without robbing taxpayers. . . . Increasingly, major companies determine where to maintain, expand or relocate facilities based on how much money they can take from taxpayers’ pockets in the process (p. A17: 2016).” Only through total revamping of corporate income taxes can we take these chances for so-called taxpayer theft out of the hands of lawyers and accountant. As many Americans rightly proclaim, in many ways the moral compass of America has waned of late. And, when you think about the complexity and unfairness embedded in our FIT, there is little wonder that many fudge if not downright cheat on their income taxes, business and personal. We need to take those opportunities out of FIT and then be vigilant about enforcement and rule of law.

In free and open countries in order that the electorate understands trade-offs of governmental taxing and spending, all concerned citizens should demand a straight-forward approach to taxing and spending. Doing otherwise suggests citizens want to continue to elect leaders who can use an incomprehensibly complex tax code as cover for cunningly miss-identify taxing and spending priority links. A valid system that is useful and allows an electorate to decide on spending priorities must present alternatives in an honest and understandable fashion. All government spending removes monies from an economy and puts it into government which can forever use more money. When one program or person gets something it is taken from another, governments do not create wealth they take it. Governments like people have limited resources. American Federal Income Tax systems, for individuals and organizations, by any

reasonably objective standards of understandability and truth are unmitigated purposefully deceptive disasters: any other bad adjectives belong here as well (Service and Loudon, 2013).

A system that is honest and simple would feature a simple non-varying graduated tax on individual total income: basically what is called adjusted gross today, but with no changes at all to income because of source or anything period. The new system should be designed to be revenue neutral with no differences or considerations for categories of income, statuses, dependents, deductions or deviations in any form or fashion. A revenue neutral tax on revenue for organizations with nothing attached or different for any entity could meet any honesty test. The individual graduated tax can be put on a \$2 calculator even if we wanted to make 1,000 brackets: suggested estimated rates start at .5% and go to 33.5%. In a system like this everyone would pay the exact same percentage on each portion of their income with absolutely no differences for any reasons at all. And, a 1% 'business' revenue tax would be about revenue neutral for corporate income taxes collected today and would not vary for any reasons.

Continuing on that same stream of thought, in all free national elections, individual and corporate income tax reform proposals are part of any serious candidates' proclaimed stances. However, current proposals for revising national income taxes, as epitomized in America's 2016 campaigns, offer no tangible reform. Recommended changes for limiting the number of brackets, changing income classifications, changing rates on certain earners and differing types of income, and changing, adding or deleting deductions all bunk. All these changes merely add further complexity to the current unintelligible income tax codes. Across the globe, as exemplified in America, income taxes are solely "fool-the-electorate" approaches that use smoke and mirrors to hide the truth thus preventing payers from understanding costs and benefits (a few clear examples are shown in both Alexander references). Unintended or otherwise, toxic tax code has societally degrading ramifications, in part, because of the many and varied interactions between largely unpredictable humanistic behaviors and the complex system. Those tax codes disregard virtually all moral hazards and hide actual taxing and spending links. Such scams as "free college tuition" need to be identified as what they are. In this case it is not free, it is tax payer funded college tuition and the cost to each tax paying entity needs to be clearly and directly identified so the taxpayers can decide what they want to pay for through taxes. Truth and understandability in taxation and spending are the solutions. To reemphasize one simple point; when a politician tells you they are going simplify FIT by reducing the number of brackets, they are either not too bright or taking you for a fool: laugh them out of office!

The current FIT's contrived complexity manifests into harmful deception. Even indicators and behavioral modifiers are the object of tax policy and thus no longer have the intended impact when coupled with the unpredictable variability of human emotions and resulting actions. Changeable substitution effects override discouraging or encouraging actions attempted through tax policies in a manner that is way beyond cosmically convoluted. Each FIT modification is layered into an inconceivably complicated system causing fabrications that mirror ignorance and wishful thinking.

Investments are key to economic growth and when we attempt to control investment by central planning or taxation, failure results. In GDP investments have multiple and lasting effects whereas government spending and consumption spending are recycling at best (Heilbroner and Thurow, 1998). Likewise, the uncertainty and risk of central market control via tax interventions are imperfectly inefficient with even signals being impossible to determine. Lack of stability and certainty are the demise of investments and consequential economic growth (Hewett, 2016): current FIT is a main retardant. Only investments lead to

productive innovations. Failure to innovate keeps economies stagnant and causes organizational and individual failures. Political leaders who are unwilling to explain the realities of taxes and taxation and the impact on society, keep citizens in a dangerous zone of misunderstanding that simply cannot work over the long term

Are taxes, deficits and debt beyond repair? Maybe. With the key being, will voting citizens continue to allow our elected leaders to mislead us first and foremost through a mirror of lies called federal income tax? The U.S. economy has a rare fatal disease; and we are arguing over telling the truth or lies, simple understandability or deceptive complexity? FIT change outcomes cannot be predicted with even a smidgen of a chance of working as intended until FIT is understandable to the voters. Don't believe this ranting tirade? Read the FIT code!

In economic terms, problems with FIT are structural to the core with consistently cyclical problems that are intended and unintended, predictable and unpredictable. U.S. FIT, in no uncertain terms, revolves around embedded obfuscations design in, and further promoted by periodic unpredictably useless politically motivated contradictory and confusing adjustments. If there are not enough adjectives here to define the depth of the complex deception of FIT, add your own, for you cannot overstate this absurdity with any amount of ridiculous verbosity.

Relatedly, in addition to individual income tax, corporate inversions and proposals for new corporate tax systems and rules in America and the EU remain at the forefront of the news and politics. And, everything just said about individual FIT applies at least doubly to corporate FIT. Yet, again no real reform is being forwarded in the corporate tax arena. In a recent Wall Street Journal editorial, we see the politics and absurdity of the current tax system and how it can be manipulated. "Treasury is also planning to empower Internal Revenue Service auditors to declare instrument as part debt and part equity, adding more complexity and fear to an already complicated process. To top it off, the rules come with new record-keeping requirements. . . . Mr. Lew and the entire Obama Administration seem to be doing their best to punish as much of the economy as possible as they head for the exits ("Treasury Inversion Scythe," 2016: A12)." All concerned citizens need to take these possibilities away; our system allows these speculations.

In these cases all that is being considered is how to trick consumers into thinking the taxers are bleeding the greedy organizations; not that they are raising costs of goods and services to consumers. An early 2016 scam was being offered to tax each barrel of oil \$10, but let the oil companies pay for it. Really, are the electorate that uninformed and ignorant? Sure, the oil companies can just take this out of their profit per barrel just like they do when their prices rise for all other reasons. Year in and year out, big oil has margins of 7 to 9% almost regardless of the cost of oil per barrel. These margins would hold if you subtract out all oil company employees who make more than Congress members (we challenge the reader to understand corporate costs, profits and related prices).

These accurate proclamations reveal that those that "can" vote must stop enabling these massively complex frauds called income taxes. Nothing related to income tax code in America is for the good of the taxpayer; those purposefully complex codes are overwhelmingly designed to confuse and hide the fact that they are designed simply to buy votes and enrich politicians who are purchased by special interests.

The negativity and harm caused by the complexity and untruth of the "makes a fool-of-us all" income tax system in America cannot be overstated no matter how hard anyone tries. Yes, as

noted above, truth and understandability are the only solutions. Furthermore, simplification to a very significant level is required for understandability.

Will anyone listen, does anyone care; will enough of us work to understand the implications; will a critical mass of us demand change? It is to be doubted, but we had better wake-up if we value the American dream of a better life for those that will work for it. We have a great income tax plan and there are many others that could do the job!

It is abundantly clear to anyone that will take the time to analyze American FIT that all of its current proposals manifest themselves toward directing behavior and guiding a society further into dependency as well as allowing politicians to buy votes and lobbyist to make themselves and their political coconspirators rich. Actions always speak louder than words and regardless of what the stated purposes of FIT in American have been, one is simply left to say: the results speak so loudly that one cannot hear the stated and even often laudatory purposes. If you doubt any of this start by checking out the net worth of anyone who has remained in the American Congress for any period of time and ask if others get as rich as they do on similar salaries? Then check on how much is spent by organizational and personal lobbyist to get so-called tax breaks: see which U.S. counties are the richest. Rich companies and individuals know how much their money will buy and poor people know how to value their votes: none of these people are fools.

Years of findings and theorizing related to the study of complex systems shows clearly that understanding the parts of a vast and complex system does not assure understanding of how the systems will normally react. This is because the most complicated part of understand any system is grasping the many interactions with other systems. In the current topic of federal income tax in America we see millions of individually easy to understand codes and guidelines interacting with basic economic theory, and the way human actions respond to those tax codes and the many instructions that guide users (Miller, et al, 2015; Senge, 1990; and Von Bertalanffy, 1968).

Real Impact of Itemized Deductions and Personal Exemptions

We could write a book on this, but it is clear that people do not get the impact they think they do related to itemized deduction nor does it seem appropriate to jack taxes up so that one can write off a deduction because they exist. This approach reminds us of the stupidity of buying a product that is valued at \$90 for \$19.95, plus you get one free. Yet, you continuously see merchants using paid advertising to push their wares and giving you that one "absolutely free." Ask only for your free one! How can a thoughtful person buy that? Just like we buy the fake of getting a deductions of an average 12 cents for spending a dollar (average effective rate on AGI is less than 12%).

When a family files a return and itemizes deduction, most do not realize that they would get a \$12,600 deduction if they did not itemize deductions, and when you couple this fact with the effective rate we see on average tax payers save a little less than 12 cents for each dollar spent say on home interest. When you see a current joint return with an AGI of \$75,000 a year and that itemized \$25,000 they get a net benefit of 14% of the \$25,000 and they would have gotten \$12,600 benefit if they had zero deduction. So they saved less than \$1,750 by spending \$25,000; not a great reason to dump money into interest as so many say, "I bought a home so I could get a deduction:" not too bright. And, if we want to encourage home ownership we have to ask why? Has that form of social engineering worked as expected? Moreover, on a related deduction, if we realized the cost of having a child versus what you save on taxes, economically no one would have children!

The Revenue Goal and Understandability

In light of the need to use taxes only to generate revenue, the worthy mutual assumptions of any new FIT can be described through a simple analogy. In the 1500s Martin Luther rightly proclaimed that the Bible should be in a language normal people could read and understand. And, further, he justly declared that the code the Bible professed should not require a hired intermediary to interpret and plead the case to the code giver that an individual was complying. American FIT perfectly “fits” the profile of the Bible before Martin Luther nailed his professions to the door of the powers that were benefitting in keeping the masses ignorant and at the mercy of those profiting through selfishly purposeful complexities (Broom and Service, 2014).

A General Guide: Toward an Answer

Few among us would fail to admit that the trial and error experimentations allowed by free markets are the most efficient and effective way for the best delivery of cost effective goods and services ever devised (Allison, (2013). The only real problem with this free market selection is that it rewards those that are most effective and efficient and punishes non-value adding entities. Other systems work well to reward non-value adding individuals and organizations.

Extrapolating these thoughts, we need to make more open taxation that is understandable; a FIT that does not cloud innovative product experimentations at a minimal of cost with no complicating connections relating to cost shifting or benefit associations (taxing-deductions/incentives). That cannot be done when the system is simply not understandable and not an honest representation of costs and benefits. Let us apply this to FIT.

A simple graduated tax designed to be near revenue neutral could collect the same as today’s complex mess from all tax payers. Actually, it could be a good idea to add a slight increase in tax rates order to raise additional revenue and work toward debt and deficit reductions (do NOT increase for more spending). Regardless, with new tax codes the average person’s tax bill can be set to remain essentially as it has been over the last few (we would suggest five years on average). This new way of determining FIT could be done by calculating averages using past effective tax rates per AGI for individuals with no considerations for categories, deductions or deviations in any form or fashion; and a tax on revenue for organizations with nothing attached or different for any entity could become the standard.

A note here to keep in mind that since AGI and tax data are per return versus per SSN, lower income individuals will actually receive a tax break because of the lower rates we are proposing per SSN. As a simple example think of a joint return with an AGI of some \$75,000 (a somewhat upper end middle income). In that case, the family would be paying today on average 8% of the \$75,000 where under our proposal they would be paying variable rates: i.e. if one made \$25K and the other made \$50K, we would have rates of 3.2% and 8% respective (See Figure 1 and note our recommendations will make it more equal to today’s total tax burden. The recommendations given in Figure 1 will provide a tax reduction for families at lower levels of income, and as income increases, the tax burden will be less effected with upper levels actually paying a bit more tax: this scenario is politically the most popular—whether right or wrong. And, lastly, because of the taxing by SSN, more families will see the advantage of more people in the family working.

For those enamored with the “rich” paying their fair share, the fact is that itemized deductions help the upper income tax payers the most should be a huge consideration: "House

Republicans point to data showing that upper-income taxpayers benefit much more per capita from tax breaks than lower earners, so reducing breaks across the board would maintain a progressive system (McKinnon, 2012: p. A2)." Again note that benefits of joint returns being replaced by per SSN returns are skewed toward lower income individuals. In other words, our proposal will be significantly better for the lower income groups and marginally higher for the upper income groups. However, top income groups put the most money and time into taxes; many would gladly pay a bit more to eliminate the need to consider the impact of taxes on their decisions and to pay zero for tax advice and calculations.

A close examination under common sense and economic principles will show that the upper income increases in FIT can be made up for by ease of compliance with zero cost for a third party and freedom to consider all investments and various expenses without any mitigating convoluted tax considerations. Moreover, our individual FIT system suggestions make it equal for all tax payers with no penalty or reward for being married or single; and will reduce the tax burdens for medium level earners and increase it a bit for those at the very top, the '1%ers.' Savings on "paid" tax advice, record keeping, filing time and impact of taxes in financial decisions, when added to the intellect, talent and time of those currently involved in essential transferring and shifting income versus building value over time, would have a lasting effect on increased standards of living. For indeed, innovations in the end are the only thing that truly lifts all boats in an economy (Baumohl, 2005 and McCloskey, 2016; and (Zander and Zander, 2000). Only excess monies kept can be invested in productivity, product and service enhancements. People eat and live first before investing.

The individual tax would be in a table where everyone with any income simply entered their AGI (again reshaped slightly to make the new AGI all income and gains period) and then the tax is looked-up: no need to use any other criteria than total income. This graduated tax offers zero complexity since it all will be in a table or in \$2 calculator regardless the number of brackets. In a system like this everyone would pay the exact same percentage on each portion of their income with absolutely no differences for any reasons at all.

For corporations, a "revenue" income tax would be only have to be about right at 1% of revenue for every single organization that files a return today. Or we could, we say should, extend this and put in an all organizations tax of less than 1% of revenue. We ask, are the complexities and decisions of tax exemption for certain organizations truthful and worth the cost of differentiation? Do not all organizations benefit from our federal government spending for the military, social services, roads, national parks and so on? This is simply not a separation of church and state issue, but a matter of fairness and paying one's share that is so loudly applauded in the press.

With this level of simplicity and understandability people could vote on whether or not they want to pay for something. For example if we want to make college education paid by the government (falsely labeled "free" by a 2016 American presidential candidate) it could be determined that that would cost all taxpayers say 2% (or whatever it ends up being) and maybe another .1% for organizations (note that percentages here are only examples with no justification). Then people could vote to add that 2% equivalency to the organizational and individual FIT proportionally as they wished. In this case voters (as funders) could evaluate clearly that if a program added a .1% tax to organizations they would be paying .1% more for goods and services and/or the direct part added to individual FIT. These costs would mirror true cost and not hide who pays what and how as is done today. And, if we ever think we need to do some social engineering just think how time and again we have seen the unintended consequences of trying to shift and hide true costs. And, that encompassing truism, 'that when

we spend anything anywhere, there is a trade-off that came from somewhere and can't be spent elsewhere.' A pure fact that creeps into all taxes and spending: never be fooled or fool yourself by believing anything else in this area!

Let us now proceed to do some logic development before we totally define a tax system that would stimulate growth beyond belief and could make clear the costs and trade-offs of all current and proposed national governmental programs.

BACKGROUND

CEOs worldwide report that they are increasingly disturbed by tax costs and the heavy burden of tax compliance. Corporate inversions, which are growing at an alarming rate, show corporations are racing to get to a better taxing climate. Along those same lines we witness the problems with the complexity of individual income taxes and the abundance of unintended consequences playing out because of attempts to manipulate behavior of individuals and organizations. Encouraging home ownership through taxes certainly had consequences!

We show a better way forward here and do it while 1) directing better thinking, 2) identifying normal biases, 3) showing how to better research an issue and 4) showing fallacies of attempts to manipulate behavior through income taxation.

One thing is certain, people respond to incentives, but (a big time “but”) people mostly respond differently than we expect them too. What is rewarded gets attention, but people learn how to game systems and results simply never remain as predicted. Yes, the results of those attempts to direct behavior have to be predicted. The consequences of even the best laid plans to steer behavior are at best probabilistic and not deterministic; and even when a tax incentive works totally as predicted, outcomes do not remain stable over time. News flash, people learn, adapt, adjust and manipulate to their advantage—we have always done this with our own FITs. And, in the current FIT when you attempt to encourage or discourage some economic action, you have a multiplicative effect with thousands of combinations and permutations: impossible to predict.

Getting to the “Real” Issues, Not Simply Presenting Complaints

All too often we solve symptoms not underlying issues especially when adding to our already overly complex FIT. At some point we have seen clearly that all systems need to be redone not patched. We always need to identify the real problems and eliminate excuses for inaction. Act and change, for when we do anything to change something we can see what might work or not and then we can adjust accordingly. When and how are we going to debunk these excuses, clarify our thinking, be more innovative and improve majorly convoluted and outdated systems such as taxes and taxation?

Start by addressing the prime questions for any proposed rule, regulation, law, policy, action, change, addition or deletion (innovation) related to the key issues of the day for you and your organization. And then, admit you have confirmation biases and preferred alternatives. Then realize that if you get the questions wrong, you do more harm than good in-part because you stop looking for the real issues. Address the correct questions and then the answers matter. Here is our list of overriding questions that need addressing and answering regardless of what you are trying to accomplish or solve modified toward FIT in particular:

1. Who are the constituents and how does the change affect each one?
2. Will this make it easier to establish or expand business, hire more people, improve profits, make more customers, improve finances, and so on?
3. Does this make it easier to follow the new or different policy/law/rule? And, harder to cheat on the new policy/law/rule?
4. Will this make the new or different more truthful and easier to understand; includes ability to determine impact of other items on the new or different?
5. What are the likely and unlikely unintended consequences?
6. What are alternative motivations to behave differently than anticipated?
7. How will this reduce the national/more local, personal or organizational deficit and debt?
8. How will this help move people and organizations to independence; or create opportunities?
9. Will this produce more stability locally, regionally, countrywide or worldwide (Hubbard and Kane, 2013 show what real economic balance entails)?
10. Will the change make individuals or organizations more innovative?
11. Will this help individuals, companies, organizations or governments reach more of their potential?
12. What is the risk/reward relationship?
13. Will it provide superior value and be rare with few or no substitutes available?
14. How feared is the chosen alternative?
15. How deeply embedded is the current way of doing "it"?
16. Will the solution build or replace relationships?
17. How easy is it to back out of the solution? Do you have a plan B, C, etc.?
18. Is the information you are following solid or made up?
19. Were all identified choices considered or at least addressed?
20. Will more time/resources allow for more or better information or waste time?
21. Are we addressing the issue in the simplest manner, but not overly simple to the point that it is meaningless?

Do a cost benefit analysis for all proposed FIT changes. "The goal was simply: to create a cost-benefit analysis for each policy and to rank them by their likely effectiveness. For every dollar spent, how much good would be done in the world (Ridley, 2014)?" Continuously rethink about trade off costs. 'It' can be monetary units, time, attention, focus or anything of value. When money is taken out of an economy for taxes there is a trade-off and on the other side, when tax receipts are reduced there is a cost to government often as borrowing costs. Corbett and Fikkert's (2012) *When Helping Hurts*, shows clearly that enough money has been spent in many parts of the world to affect peoples' lives, but desired change has not followed: tax money is not any more effective than charity funds in equalizing income over time. The same rules that apply to profit making businesses should apply to the so-called non-profits and all forms of taxation for effectiveness is all that matters in the end. If you innovate taxes or other items, and if it is not effective, you have just wasted resources.

Do you see how these questions should be applied to developing a new FIT system? At this point we should be thinking more clearly, using more of our innate and learned creative abilities to more effectively change through innovation.

Next let us briefly go over some of the more normal biases we all have in order that we clarify our questions and our resulting answers in the most objective way possible. Remember, human's exhibit behavior that shows we are most often confident when we have little to no

knowledge: ignorance more often breeds confidence than doe's knowledge. And, those that think they are least biased are generally the most biased: know and admit your normal biases.

Fairness? Understanding Thinking Biases as a Base

Here we are in a quandary trying to discuss a topic that everyone brings up when discussing income tax worldwide and in America especially so close behind such a contentiously contested close national election. That is the issue of fairness. Fairness is a term that is relative. But, we all believe in our hearts we know what fairness entails. However, that is at best an illusion. Humans are simply incapable of looking at issues that affect us and those we care about from a totally objective view. Humans see their perceptions as realities, as the old saying goes, 'we do not describe the world we see, we see the world we describe.' Reality is unknowable by humans with a term like 'fairness.'

As stated here and elsewhere, our proposals will offer tax rates that are a bit lower at lower income levels and higher at higher levels of income. A quick review of our Tables shows exact percentages of effective rates per AGI for average incomes of \$50 and \$200K with differences starting to edge upward \$500K and the largest increases occurring for those with incomes over \$10 million (from 20% to 32%). One point key here, is that the double taxation angle for dividends and capital gains means less under our recommended business tax change to an all organizations revenue tax percentage of less than 1%.

Note that the ability to shift income afforded by taxing each SSN separately, gives 'breaks' for those that filed joint tax statements currently. With the largest 'tax break' being for those at the lowest levels of income. For those with incomes above \$500K a much smaller benefit can be gained by deciding how to divide incomes. With these 'fairness' thoughts in mind, let us briefly review how we can clear our thinking and thus understand what a degree of more objective 'fairness' might require.

As noted earlier, we all have cognitive biases that frame our thinking preferences (mental predispositions). We feel that understanding these normal biases is a good base to better understanding the illusiveness of 'fairness.' Our FIT proposal continues and expands the progressiveness of income taxes as just detailed. In all cases the biases of citizens and political leaders alike, pertain to determining what 'fairness' entails with tax and taxation. Part of this is because we cannot or do not consider the implications of taxes at the same level that we consider other earnings and expenses that we or our companies encounter. Moreover, we have an even harder time seeing the average or overall impact of FIT without considering our specific circumstances and resulting taxes. Start by admitting that thinking biases are facts and they are not necessarily good or bad, fair or unfair, they just are; but we all have them. Our biases influence all our considerations for arguments, form the base for all frames of reference and mental models, and all too often these cognitive biases are unknown to predisposed humans (or at least not considered overtly). These lens on human thought guide all views of others and cultures, judgments and actions assisting we humans in determining and justifying our place in the world. When unconsidered or not known to us, our cognitive biases keep us in our incomplete known and unknown unaware ignorance (Bate and Child, 1987; and Service and Carson, 2010b). These intellectual partialities, guided interpretations, or mathematical weaknesses can keep us from defining anything accurately. And, of course incomplete or wrong definitions stop us from innovating and creating appropriately new and different products, organizations, selves, or approaches (Isaacson, 2007 and 2014). We favor what positively affects us individually—change and seek the greater overall good and it will

advantage you through benefiting the society where you must make a living through a hopefully happy life of contribution.

Chopra and Mlodinow (2011), Dobelli (2013), Dorner (1993), Drucker (1980,1985a and b), Grudem and Asmus (2013), Guilford (1986), Landsburg (1993) and Sternberg (2003) all provide beginnings to defining supersets of cognitive biases outlined within this manuscript.

Self-justification combined with confirmation and attribution biases rule our lives; recall anew that correlation is not causation. A key human talent is assessing a lot of information in such a way that our prior conclusions can be reaffirmed. Our 'justifying' conformational attributions lead the successful among us to the 'how I did it' arrogance. Most of us accept these first- and second-hand stories as models to follow (see Gladwell, 2008, for the real story of success). However, all stories or accounts (this manuscript is no exception) are accounts of some selected facts designed to stress some preferred points: stories exist on a spectrum of degrees of factuality and completeness. "Success accounts" are made in the light of the narrative fallacy, 20-20 hindsight, superficial knowledge, liking prejudices, self-actualization, fulfillment and expertise biases, with plenty of room for attributing success to natural brilliance (I did it) or lucky ignorance (you did it). Under and over confidence and superficial knowledge are hallmarks of these types of success stories. Political ads along with what you read about FIT and FIT suggested changes, are stories. And, all of this manuscripts about fairness, addressing the proper questions, understanding and controlling personal biases and thinking clearly applies a 110% to FIT related stories, your, theirs or ours!

A close review of the "economist" based work of Levitt and Dubner's *Freakonomics* works, Gladwell's well-researched books (all dates) on thinking and success, human nature books by Hall and Brooks, or Sternberg's work on success intelligence, all will result (more often than not), in a conclusion that after-the-fact descriptions of how individuals became billionaires, professional athletes or otherwise rich and famous, mean little or nothing to the rest of us (Service and White, 2012). In our experience, these stories are for the most part harmful. Avoid these and other expert biases by remembering that all too often experts know little outside of their expertise and favor what they know: asks what does the advice giver have to gain? Our economist friends looked at the U.S 2016 presidential elections with glasses of the unrealistic assumptions of economic theory, our behaviorist friends looked at it through their Ph.D. professors' eyes, our psychologist friends—you get the picture. Professors and those with Ph.D's are not normal and have their thinking clouded by many years of deep study in extraordinarily small areas of theoretical knowledge. These thoughts when combined with normal biases, make us sure of why we all see FIT so differently: know your biases well. FIT failures and successes are simply not totally unbiasedly describable.

Shifting gears a bit, note that innovation, doing something new or different, is the only way to lift all into improved lives with greater productivity in order to build a framework for a better world (Drucker, Freidman; Gladwell; and Peters all dates). "Innovation is often the act of taking something that worked over there and using it over here (Handley, 2014:p. 135)." FIT innovation requires open minded clear thinking which understands and uses our biases as merely our perceptions, especially about a term as elusively abstract as 'fairness.'

Other biases give a false sense of the probability of success, which is often due to purported common wisdom, close at hand biases, and/or the illusion of control over random events. An overabundance of choice leads us to fall back on favored solutions, which guide us to misunderstanding real probabilities. Most reading this article have nearly unlimited choice; a fact that does not fit billions of others. Coincidences are extremely rare and what helped

“them” may or may not help “you.” Recognize wishful thinking, for “should be” is seldom equal to “is” (Broom and Service, 2014; and Service and Carson, 2010a).

We live in a world where unbounded mathematical ignorance is accepted and this does not bode well for FIT change alternatives. We see statistics misused more often than not (Kerlinger, 1986). In almost every case where statistics are used to present a case for a political situation or ad, we see that a case can be made for both sides of an issue. Mathematical trends shows that all things tend to return to the average over time; there is no balancing effect to independent events; exponential growth is confounding and hard to understand; false comparison figure/number biases are the rule; and small numbers or single examples might not indicate much of anything useful. This could go on, but the point is a lack of clarity with inadequate math skills are all too often an excuse to defining the wrong issue, or defining the right issue wrongly.

Our overly informed, media-genic-connected world clouds our thinking with too much information about outliers among us, those non-standard individuals that make spectacular headlines but do not capture the majority. At best, it creates a feeling of knowing when in fact ignorance abounds about any major issue: no one (that is correct), no one has a handle on the entirety of the U.S. FIT code. And, fairness of our FIT code simply cannot be assessed under the existing smoky deceptions of the millions of complexly confusing words.

We, who are supposed experts in our fields, know how little we know about what we know the most about. Academic research in management, leadership, strategy and even economics is not very productive and is like seeing through a glass door (Mintzberg, 2004 and 2009; and Sternberg, 1996)! Much of what we think we know is wrong and all is based (and always incomplete) toward each individual’s slant on reality. We select the facts we want and use them as we see fit to prove ourselves correct (Corbin and Strauss, 2008). The current authors must admit, we know only one fact for sure: we might be wrong. But on FIT . . .

Humans prefer answers that suit us best: with FIT this is unusually destructive, because its complexity insures that we cannot with any degree of certainty determine what suits us! Humans have an illusion that we are good forecasters and we select the alternative with the least conditions or circumstances that fit our preconceived biased notions; exemplified in FIT’s misplaced social engineering. Groupthink, distorted views of history, perceived associations, preferring status quo, preferring the new over the old, beginner’s luck and association biases are among many other thinking errors abounding in society and further clouding FIT changes. Even the vaulted “experience” variable seems to damage judgment as often as it improve its (Rumsfeld, 2013). Everyone reinterprets what happened retrospectively (Blair, 2010; Bush, 2010; Obama, 2004 and 2006; and Reagan, 1990-of these only Blair admits possible mistakes), results of recent FIT changes model this rearview mirror analogy.

History, culture, psychology, sociology, economics and human nature say that people always respond to the incentives (Landsburg, 1993); and seldom if ever to the intentions behind the incentives. FIT change fabricators have not yet learned this. Most of us use-false-logic anchors, assuming that if it has worked in the past it will succeed again. Never forget that expectations may or may not be realistic. People believe their own soul-searching, and most of us use (or hear) nonsensical blather to disguise ignorance.

When looking for and defining real issues, do not overlook the simple or the complex knowledge just because it is complex or simple. Few of us accept anything that does not

corresponds to our beliefs and self-image as we filter out everything else: our individual views of fairness naturally distort thinking. Humans like creating dichotomies, simplifying to black and white those things that are nearly always gray. Choose your comparison 'others' carefully, realizing we love primacy and recent developments. Then, all have that "not my idea" bias. Book smarts don't transfer to street smarts easily, and we also know the opposite is no less true. Think about what you read or learn and ask 'how can I use this or that insight or theory.'

Avoid unfounded fear or regret, procrastination, junk envy, managing the "you" product. Watch cherry picking (always going with the easiest solutions); avoid the illusions of unfounded knowledge, skills and abilities, and excuses of bad luck. Circumvent over or under thinking issues and answers (Gladwell, 2005; and Hall, 2011). Grasp that we may see a single cause behind any complex issue; but generally there is no easy "one size fits all" response. Conspicuous, significant, main and prominent (possibly relevant or not) information or actions have more influence on us. And, of course if we are not sure of the stakes, we need to start by thinking they are high. Almost too much to consider, but try none the less if 'fairness' beyond individual perceptions is the goal.

Among our favorite 'truisms' are 'understanding beats categorization,' and 'all generalizations are wrong, including this one' (Rumsfeld, 2013). Yes, we all lie to ourselves more than anybody else, especially about fairness (think about how you change your mind when something affects 'you.' Brooks, 2011-study of human consciousness). Changing one's default settings can change behavior. By thinking to learn we learn to think, so think but act, using all new or old insights and slogans with wisdom (Service, 2006). Better and clearer thinking leads to better results in life and innovations that move a society forward (Albrecht, 2003; and Broom and Service, 2014). As noted previously, our current FIT has led citizens to the false assessment of what is in it for me and how that is fair: very short term and narrow views permeate FIT recommendations.

Use the tools and guidelines we have presented for thinking clearly, utilizing more of your innate abilities, and improving your learned competencies in order to effect change through innovation. Clear up your thinking about fairness as much as possible when you are considering 'your' income tax burden versus that of fellow citizens. To a degree we can all agree that those at the upper end of incomes do get more benefits from infrastructure, military protection and the judicial systems in America and so perhaps should pay a bit more percentage wise than those at lower levels. Regardless, there are NO (zero) magic bullets or pills, no single or even simple secret answers to fairness, equality and just rewards (Aczel, 1999; Tyson, 2007; and Von Bertalanffy, 1968). Only balanced hard work and discipline are behind your becoming an effective leader for innovation: a leader who can fit the leaders, followers, and environments facing them in order to stand out as an effective leader who has honor and lasting respect (Abernathy and Utterback, 1988 and Service and Arnott, 2006). Become a proponent leader who can look at issues as personal as FIT and make a relatively unbiased, fair if you would, proposals on revamping a mess called income tax.

Under the questions, and fair and unfair biases identified above, let us now look more directly, openly and clearly at U.S. FIT.

INCOME TAX

Many worry that recent events in Greece and other European Countries may foretell the U.S.'s future (Richards, 2014—provocative 'practical' non-academic book; Lahart, 2015; and Stephens, 2015). The United States Government's deficits and debt appear, to a growing number, to be unsustainable in part because there are no plans to reduce the debt. Keep in

mind that totally eliminating annual budget deficits does nothing to reduce the debt. Additionally, note that in 2015 interest on the debt was about five times the cost of Home Land Security or 27% of the Defense Budget growing (see "irs 1040 Form," 2015: p. 101; and Katz, 2016). Defense spending is slated to shrink significantly, yet the interest on the accumulated debt continues to grow.

Annual deficits of half a trillion dollars loom for America as far as the eye can see. And, most estimates by the CBO indicate that within about 10 years all of the discretionary spending at the federal level will have to be funded by borrowing. Yes, we will have to borrow the cost of national defense, education, home land security and more. None of this mentions the \$100 trillion dollars of unfunded federal liabilities (see and study annual CBO reports—the best non-partisan analysis you can find). This unfunded amount needs to be contemplated in light of the fact that organizations such as our University simply are not allowed under law to not fund at a significant level their own pension plans. Funding our greatly reduced pensions currently cost our University 16-20% of its budget with revenue and expenses being approximately equal at about \$150 million most years. Many organizations are having to put 10-20% of their total budget into a retirement system. In other words, the federal government does not do what it demands other organizations are compelled by law to do. Some of the numbers and suppositions included in this paragraph can be under some slight level of dispute. But, all reputable sources point to the numbers and suppositions here. If you doubt this last statement do your own research or accept what we say.

Compounding these numbers and difficulties is an educational gap in America as just described where few seem to care to understand governmental finances at a level necessary for self-governance (Shinn, 2011 points to practical "understanding" gaps in the MBA). Along the lines of minding this critical gap, Friedman and Mandelbaum (2011) devote much of their book on solving the major issues of globalization and hyper-competition to changing the current educational system in America. They stress again and again that we cannot continue with a system based on lectures and memorization. Friedman (all dates and beyond) harps on the fact that we must shift our higher education systems to require innovative thinking and creativity if America is to remain competitive. As they say: "[We] have a new structural challenge in the labor market that can only be addressed by more education and more innovation (p. 74)." They say current employers are "looking for workers who can think critically, who can tackle non-routine complex tasks, and who can work collaboratively. . . . they also now expect all the workers they hire to think for themselves (81)." This type of thinking requires a "completely open mind. . . . and then the ability to learn constantly and challenge the status quo (p. 84)." For as they rightly point out, "The best predictor of the future is not necessarily just how someone has performed in the past. . . . It's also how much the person has adapted, created, and innovated (p. 87)." We challenge students (and professors) to begin to challenge themselves to open their minds. Get into thinking innovatively, "We want every employee to be present in the room. . . . Now you have to have people who can think and interact and collaborate (Friedman and Mandelbaum, 2011:p. 93)." Require the focused engaged presence of all in your classrooms or businesses (Broom, et al, 2014; and Service and Guess, 2015). And, do it yourself related to FIT if you care about the future of America.

Specifically, Sharma (2016) shows that democracies work, but always through continuous change. Distinguished economist and historian, Deirdre McCloskey (2016) identifies the key separator for wealth and prosperity of nations as ideas and the moral vision that work, innovation, happiness, prosperity, equality dignity, liberty and prudent enterprise were to be valued. The works of Adam Smith and Benjamin Franklin were often cited by McCloskey as old

exemplars of the new value of taking as esteemed work improvement and innovation. Further, the idea that leaving markets free to do their work in empowering people to improve was achievable and desirable was made exceedingly clear. McCloskey makes it crystal clear that most government institutions make us poorer. Our tax proposal here would bode well for the U.S. economy under McCloskey's pronouncements. It is so way past time to innovate in the area of U.S. federal income tax.

Using the area of governmental finance as an example of interactive learning, in order to mind the gap, we must shift our attention to teaching governmental finance topics so that university graduates comprehend where the U.S. stands with deficits and debt. U.S. deficits and debt are in the trillions of dollars. And, trillions are not numbers we can easily grasp. Let's begin our re-education by shifting to self-directed understanding and responsibility (Hunger and Wheelen, 2011; Service, 2006 and 2009a and b; Service and Loudon, 2015; and Service, Reburn and Loudon, 2012). If we are to innovate and make government inlays and outputs more understandable we must look to change our FIT to be reflective of actuality, not a way to hide cost and expenses to buy votes.

Individual income tax and related spending, revenue and debt

Federal revenues come from: individual income taxes, social insurance (called payroll taxes) taxes, corporate income taxes, excise taxes, estate and gift taxes, earnings of the Fed, customs duties and miscellaneous fees and fines. Borrowing is debt and not considered revenue, so that is a topic to be addressed later. Historically, over the past 40 years, on average individual income tax makes up 45% of the total federal revenue and represent 8% of the Gross Domestic Product (GDP). The next largest revenue generator is social insurance, mainly for Social Security and Medicare insurance which makes up 34% of the total revenue and 6% of the GDP. Corporate income taxes have contributed roughly 10 percent of the total revenues and represent 2% of GDP. These numbers were taken from "The Budget and Economic Outlook: Fiscal Years 2012 to 2022" a report from Congress of the United States Congressional Budget Office (CBO-report January 2012: p. 81). CBO historical numbers are generally accurate and based on data most would consider highly reliable. However, it is important to understand that CBO projections must use assumptions and they have proven to be wrong often by factors of 10. As with any projections the accuracy decreases over time: think about weather forecasts! Additionally, page 101 of the 2015 1040 income tax instructions booklet supports the CBO numbers and also provides pie charts for income (revenue) and outlays (expenses-payments). Study these pie chart pages of the 1040 instructions booklet every year.

To insure taxes collected are roughly equal to today's collects, and to understand basis economic taxation data, also see "Income Tax Collections Data (2016)" that show personal income tax collected in 2015 was \$1,504.8 trillion and organizational income taxes collected were .3438 trillion from a GDP of \$18,558 trillion ("GDP Statistics Data," 2016). Now look Figure 1 to develop an understanding of income taxes and who pays them.

Figure 1: Individual Income Tax numbers

AGI # 1,000K	AGI Amt. in Millions \$ & /% of whole	#returns K & /%	Average \$\$ in AGI brackets	New %s For Bracket on AGI	New % AGI on Average Income	New top of bracket cumulative on AGI	Old %=@ AGI	%=@ taxable income	Tz	%= @AIG no EIC
All	8,374,218/100%	145.4M/100%					12.5%	18.9%		
\$1<5K	27,520/<.03%	10,693/7.4%	\$2,574	.5%	.5%	.5%	.17%	9.8%		
\$5<10K	94,271/1.1%	12,387/8.5%	\$7,621	.5%	.5%	.5%	.45%	10%		
\$10-15K	161,448/1.9%	12,926/8.9%	\$12,490	3.5%	1.1%	1.5%	1.1%	7.8%		
\$15-20K	206,970/2.5%	11,880/8.2%	\$17,422	3.75%	1.8%	2.1%	1.8%	8%		
\$20-30K	475,649/5.7%	19,199/13%	\$24,775	8%	3.2%	4.04%	3.2%	8.5%		
\$30-40K	505,069/6%	14,520/9.9%	\$34,784	10.5%	4.9%	5.66%	4.9%	9.6%		
\$40-50K	491,714/5.9%	10,984/7.6%	44,766	11%	6.2%	6.73%	6.2%	10.7%		
\$50-75K	1,165,812/13.9%	18,949/13.4%	61,524	13.5%	8%	9%	8%	12.4%		
\$75-100K	1,031,611/12.3% Total of 49.3%	11,926/8.2% Total of 87%	86,501	14%	9.7%	10.25%	9.3%	13.5%		
\$100-200K	1,977,406/23.6% Total of 72.9%	14,756/10.2% Total of 97.3%	134,007	20%	12.7%	15%	12.7%	17%		
\$200-250K	376,744/4.5%	1,697/1.2%	222,006	30%	16.6%	18%	16.9%	21.6%		
\$250-500K	704,188/8.4%	2,104/1.5%	334,690	31%	21.4%	24.6%	21.1%	26.1%		
\$500-1M	403,585/4.8%	598/.41%	674,891	31.5%	26.4%	28%	24.2%	28.75%		
\$1-1.5Mill	163,096/1.9%	135/.1%	1,208,119	32%	28.7%	29.4%	24.8%	28.97%		
\$1.5-2M	96,284/1.2%	56/.04%	1,793,571	32.5%	29.6%	30.1%	25%	29.11%		
\$2-5M	236,076/2.8%	79.4/.05%	2,973,249	33%	31%	31.9%	24.9%	28.77%		
\$5-10M	130,764/1.6%	19.2/.01%	6,810,625	33.5%	32.3%	32.7%	24%	27.72%		
>\$10M	321,636/3.8%	11.4/.01%	28,213,684	34%	33.5%		20.4%	23.84%		

Demand impartiality and truth by collecting the same effective rates without the complexity of the current “intentionally deceptive” FIT. Can you see that the continuous drumbeat of the “rich” not paying their fair share is a sham at best when one reviews the actual IRS collections data? Another important fact is that on average itemized deductions began to pay off when incomes exceed \$150,000 though marginally as shown above. Again, seek the truth for yourself versus accepting the propaganda: some call it rhetoric? Solutions need to revolve around a real understanding and facts not around "info-mercial-news" directed misunderstandings often given by the mis-leaders among us! We must begin to demand truth and work to understand and if we are unwilling to do so then we will deserve the mess we build for ourselves, our kids and grandkids.

Given what we have presented to this point any logical person would ask why have we kept these antiquated FIT systems? It is simple, promises do create votes even when the promises are not based on facts, nor are they kept after the election. And, with the convoluted FIT in America you can see why politicians and even experts who make a living on the mess, keep the

voters in the dark: demand better to get better! And, yes, starting and continuing governmental dependencies does pay off in votes. But, ask yourself, if it serves many well. Learning to learn with facts you have sought and verified yourself leads to personal "wisdom" development and is key to a democracy working (Arbinger Institute, 2000). We need people that can figure out how to think so that they can develop their own thoughts not let others create them. We need systems that can be understood by an ordinary voting citizen not a system designed to be totally understood by well under 10 people in the world. Even the tax policy experts do not understand it all—we have experts for various portions of our income tax laws and policies. Remember, when anyone promises you something, be sure you understand what it will cost. Masking costs seems to work because we are simply too lazy to figure it out for ourselves. Nothing is free to everyone; there are trade-offs; someone else always pays; something is reduced when something else is increased; there are consequences to all actions; and lastly we are never quite sure what "collective" consequences and costs will be over the long term.

When a recent U.S. presidential candidate was touting "tuition free college," we wondered why not make all public education at the K through 12 levels free? Because if this public education was truly free, we would save most of the property tax in America that is collected primarily to pay for education for the masses. Think about the absurdity of "free." If you think something should be free, why don't you make your vocation free to start the 'free' ball rolling?

Is it time to change the system?

We use a what, what, why model of managing. We tell people to manage by saying: This is what you did, this is what you should have done and here is why. Isaacson (2007) and Service (2009) point to the need to think through relations and relationships using the power of thought experiments to pretest the effectiveness of our management models. In those words think through: What-we look for categories or lists to confirm our feeling and avoid facing uncomfortable facts; What-we should seek base knowledge and facts to grow our understanding; Why-America will continue to decline fiscally, and otherwise until most voters seek to understand before they decide and vote—for the rise and the fall of all great empires had a fiscal decline and dependence at its core (Kennedy, 1987). Develop deep smarts by learning to think and reassess beliefs. Life after all is about change, changeless principles and choices. The choice is ours -- dependency, closed mindedness, and decline or . . . Figure it out! Let us put those principles plus valid research and clear thinking to work with a FIT proposal.

Current U.S. debt and deficits are on catastrophic trajectories and unless those change nothing else will really matter. Also note that the federal income tax rate for the bottom 20% of tax payers averaged just over -5% when you consider earned income tax credits. Yes, that is a negative number. A quick look at the 1040 booklet for 2015 will show that a family of four making \$25,000 with standard deductions will get a net payment of over \$5,000 from income tax: include this in calculating income gaps for the 'clear' story. Yes they paid some \$2,000 SS related taxes, but that is a retirement program. Maybe this makes up for the inverted state system of taxation in some states? Regardless, this indicates a possible tipping point with critical mass of negative net-contributors in close at hand. Next, it seems obvious that understandability and ability to handle for one's self personal income tax are required for "good" self-governance especially in how the government gets most of its revenue. Service and Carson (2010 a, and b), in another somewhat unrelated area, show that when we misunderstand we solve the wrong problems and most often do more harm than good.

Attribution theory and related attribution errors point to our current political climate where propaganda runs amuck. Propaganda as defined by Hitler in Mien Kampf is where you are told

a partial truth to evoke an emotional response, and then hammered with the repeated story. Our current FIT systems are propaganda at the core: understand this. The bottom line is our FIT is so misleading that it has to be pure indoctrination. And, yes, we simply must focus on solving issues not arguing about fault. We repeat Churchill's call: "If we open a quarrel between past and present, we shall find that we have lost the future."

The "best" solution for any issues is the simplest possible and the derived answer must have three things: 1) truth; 2) ownership; and 3) understandability. Ideally and even possibly, every tax payer should develop a one page plan that would increase revenues from an income tax system without increasing rates, add truth and ownership into income taxes, and be totally understandable. Any future changes cannot continue to build on the convoluted misconceptions caused by the smoke and mirrors approach of our current system where even unintended consequences cannot be estimated. In fact only 2-5% of the population would not like these changes. They are the ones that buy votes or are the paid interpreters. The vast intellectual capital represented within all of these "income shifting tax experts" should be redeployed to creating value and marketing not transferring value at a huge cost to individuals and society. Eliminating the need for paid intermediaries (tax lawyers and accountants as well as lobbyist) would up the economy of America. We feel that the improvement would be at least a one-time gain of 2-8%. Consider the cost of calculating taxes, the advantage of new and smart people involved in innovation not shifting, and the better strategic decisions possible because FIT considerations are removed as a variable. Do your own calculations here and remember that historically GDP growth in America since 1776 has been a bit over 3.5% and since 2000 it has been about 2%. With historic growth American has a current GDP of \$19 trillion; if that were replaced with 2%, the current GDP would be under one trillion. How do we get growth up and running at maximum efficiency?

Until we make total and drastic changes we will just keep digging a deeper hole of unintended consequences and false hopes. We cannot keep patching the old system. Behavioral change and social engineering via tax code has basically never worked as intended; and even when it has worked it did not work for long. So why do we think it will work in the future? Unintended consequences result in our convoluted mess and too many putting their money in the wrong places or using it in the wrong ways (Conard, 2012).

Economic principles and any form of fairness (or the buzz words "social justice") requires an understanding that growing an economy can help many overall and redistribution has no such general consequence. Additionally, rights to shares of any economy can be claimed by many approaches. The approach of allocation or distribution has to have some rules; ask yourself, who would write and enforce those rules? In a free market system shares of the economy are decided by "contribution." Simply think about whether contribution should be the metric for economic distribution or not; and if not what should be the measure and who should set those rules (Stanford, 2011)? Get our FIT to value contribution not trickery.

All systems must come to an end at some point

Computer experts, scientist, engineers and business minds alike agree that all human systems over time become so convoluted that they had to be rewritten. Think about one of our longer lived descriptive systems, the Christian Bible. For as noted above, it was in the early 1500s that Martin Luther said we needed to do a few things for the Church at the time convinced everyone that if they wanted to communicate to God they would need an intermediary and the Church was glad to provide that service for a fee. We saw King James establishing a commission to rewrite the Bible and several other versions have been produced since the

famed King James' version. Moreover, at one time you could buy indulgencies (and where are those when we need them?). The ignorant masses were kept to feel this way by those that profited from the ignorance; an issues that many feel is still occurring in Islam as we see basically no books being translated into Arabic in any of the League of Arab nations in the past 30 years—closing of minds (research this for yourself)? Now we have an income tax system that is not in the language of the people where perhaps no one understands it all or even most of it and we've been conditioned to pay others to read and interpret our tax laws for us. And, if we need to communicate with the government we must hire an intermediary to explain it to us and them. Yes, as noted, in 1600 King James decided the Bible had become too convoluted and he assigned 54 "experts" to decide what to keep and exclude and how to rewrite in order to capture the best meanings from the old versions in modern language (Nicholson, 2004: God's Secretaries). Let us now do that with the tax code which makes the Christian Bible seem like a children's book in complexity comparisons.

Do you get our almost ridiculous, yet spot-on analogy? The current authors' are among the most educated among us, in tax, math and statistics but the current FIT is too complex for us. Should all of us remain ignorant and wait for politicians to tell us how to vote to keep us in ignorance and should we tolerate news people telling us what they want us to hear and believe?

U.S. Income Taxes-proposed reforms are asininely shameful scams: replace it like this!

Stated directly all current major political party FIT proposed reforms are at best shams and at worst the most despicable of lies. Let us come up with a novel idea since as Berg correctly declares "Novel ideas are the lifeblood of successful innovation (2016: p. 433)." Berg's research and this article are about understanding that we are all biased, and that we all need to work very hard to look at ideas in light of the consumer we wish to engage. In this case the customers are all tax paying U.S. citizens. To get to a better point we must understand divergent and convergent thinking and how they can be innovatively aligned (Service and Reburn, 2014).

PWC's recent CEO report shows the top concern of 79% of CEO's is over regulation. Likewise, the WSJ article of May 3, "Ending America's Slow-Growth Tailspin" rightly proclaims "[T]he U.S. economy is simply overrun by an out-of-control and increasingly politicized regulatory state. . . Parties argue over tax rate, but what's really needed is deep tax reform, cleaning out the insane complexity and cronyism." The U.S. federal income tax system (FIT) is the most disruptive of all regulations, costing significantly to ascertain. And, the untold long term effects caused by the mirage of considering taxes in personal and organizational strategic choices is immense. Yet, politician and the media remain mired in the complex tweaking of our unintelligible millions of words FIT.

The Proposal for FIT Replacement

Summarizing our findings and conclusions we see that collecting revenue to finance government should be "The" sole FIT purpose of FIT accomplished through: 1-de-politicizing code with certainty-end buying votes and favoritism; 2-easing compliance-almost eliminating the IRS; 3-being understandable and truthful; 4-removing FIT considerations from financial choices; 5-eliminating hired intermediaries and tax lobbyist; 6-stopping guilty until proven innocence assumptions; 7-ending unintended consequences of social engineering; 8-equalizing by removing statuses and categories; 9-eliminating deceptive deductions; and 10-making FIT globally most competitive: differentiate only by income/revenue.

Businesses: Replace business FIT with an all organizations 1% of revenue (same rate for foreign profits brought back to U.S.) incorporating all non-profits as well. IRS data shows that year in and year out business taxes are under 1% of receipts. If we include non-profits as indicated here, the rate could be less than 1%.

Individual FIT: Tax the AGI (adjusted to “real” total income) with no deduction, no different kinds of income or so on. Each SS number files a return. Calculate bracket rates to equal the current effective rates calculated as a percent of AGI of taxes since repeal of the “Bush” tax cuts. Brackets and associated percentages offer no complexity or decisions at all. Fifty brackets with percentage for each \$10K for \$10,000 to \$500K (rates of about .5% to 30%) would work and can be put into a \$2 calculator and on a FIT.gov cite. Everyone would pay equal percentages on the same portions of their income. Earned income credit needs to be a separate system so people will not confuse welfare intended to encourage work with FIT. Figure 1 shows our suggested brackets and completely defines the individual system: no other rules or guides.

Look at Figure 1 and specifically the “New Bracket % on AGI [we marked this as ‘Key %s’]” you can see that everyone pays .5% or \$25 dollars on the first \$5,000 they make—yes, someone that makes only \$5,000 pays the same as the person that makes \$10 million on that first \$5,000. Everyone needs to have a stake in paying for government, not just getting paid by government. Average payments for other incomes will remain about as they are today with the exception of those that make above \$1.5 million. For those with incomes of this million and a half dollar up, a bit more will be collected. The most effected group would be those that earn more than \$10 million and since their effective rate never exceeds 1/3 of total AGI (not a burdensome percentage); and FIT allows (does not require or direct) the extremely fortunate among us to worry only about improving income not avoiding or emphasizing anything.

As we mentioned before, many people worried about what we would do with the accountants, clerks, lawyers and so on who make their living recording, manipulating, and filing taxes, as well as determining the impact of strategic and personal choices. Regardless of whether or not these non-value adding FIT activities cost the economic significantly or not, the resources could generate more value by addressing innovation, cost controls, quality controls, marketing, improving management and so on (see Burns and Stalker, 1961: a classic study of managing innovation; also see HBR’s 10 Must Reads on Innovation, 2013).

CONCLUSION

Ruminate, if you would, on where we are at this point in our manuscript and the disastrous political mess that FIT plays in keeping citizens charged with electing their leaders in the dark. Given that overriding concern, do not let what we have failed to cover here, or our ability to articulate our points, deter you or allow yourself to be put off by what you perceive to be a political agenda. Additionally, do not accept what we show as the final truth. Look up the facts for yourself and verify the information we have presented. That is basically how we started this effort. We have confidence in our numbers and you be the judge about our other directed statements.

If we have been too off-putting or seemed too demanding that you accept our views, get over it! Challenge yourself to gather your own data, verify our data and develop your own plains for the FIT mess. Do you really think any view should NOT include as a minimum four things: 1) Truth-taxation cannot work when it is used to deceive people as to who pays what. We simply do not have that in our existing income tax system to any level at all and even if we did only one in a million at most could tell you the truth of it. Remember no one pays for part of

anything for you. It is cost shifting. In reality, employers do NOT pay part of Social Security for you or pay Health Insurance benefits for you. They pay those things instead of paying you. Know and understand this difference. Corporations pay no taxes they simply collect them as they sell their goods and services—has to be or they could not stay in business. Governmental “cost shifting” to the private sector is paid for by us all and is a dishonest way of indirect taxation (Cascio, 2013: p 493 starts an interesting discussion on this topic). 2) Ownership—when a large number of people pay zero and in fact get money from a system (20% get money back) they have no stake in the process and will simply vote themselves more shares. 3) Do not do behavioral modification through taxation for it does not work as intended. Perhaps if it were for only a few things it could work; or perhaps if people didn’t game systems; or perhaps if there were not unintended consequences (Ridley, 2016 a very recent of example-not as anticipated); or you add the endless lists of “perhaps.” 4) Understandability—if most all of those who cast votes and govern in this great American republic cannot understand it then they cannot vote appropriately.

Let us end with some currently useful lessons we could glean from the 2016 summer Olympics. First, it clarifies how much better the world could be if more of us could realize our born abilities and talents to a greater extent: be more of what we are capable of becoming. The trifecta of our born gifts, desire and work can come together to solve most of our personal problems and those of the world. Second, we worry about bullying from others when we mostly bully ourselves with depression, addictions, wishful thinking and just plain inaction. Lastly, the things that take zero talent—being on time, work ethic, attitude, caring, dependability, truthfulness, trustworthiness, And more—balanced with even limited natural gifts can overcome most things for most of us ordinary people! And, that lesson from Donald Trump’s U.S. presidential campaign; what got you to where you are, will not get you to where you really want or need to be. Yes, change is a must simply for things to remain the same, yet alone improve. Consider all of these lessons related to readdressing any current problems, opportunities or threats—FIT fits the problem and threat amazingly well for revamping and replacing FIT provides an enormous opportunity for learning and human economic advancement (Lazear, 2015).

In an important work on Public Trust (2002) DiPiazza and Eccles add credence to our FIT proposal by stating that the goal must be ensuring the letter and spirit of transparency in all we do as we develop a culture of accountability and participation of all people that is above reproach in all reporting systems. Get on with it and just do it or stop complaining!

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The Rhetorics of Labour Contracting As a Managerial Tool among Oil Multinational Corporations (MNCs) In Nigeria

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Abstract

This paper attempts to investigate how labour contracting is employed as a managerial tool by the oil multinational corporations (MNCs) in Nigeria. In recent years, there have been agitations by trade unions who have fiercely resisted the proliferation of contract workers in the oil industry. Violations of trade union rights are widespread in Nigeria and include the intimidation of workers; refusal by employers to recognise trade unions; and the dismissal of workers' representatives for trade union activities. At the same time, there have been concerted efforts on the part of the management of the oil multinationals and the government to arrest the situation. However, till date, few studies have categorically examined how labour contracting could be used as a managerial instrument as purportedly claimed by the affected workers and the trade unions. This research report was designed to explore the experiences of the contract workers, especially when juxtaposed with their colleagues on permanent employment. Using a qualitative research method, and employing survey and interview, the findings show strong resentment on the part of contract workers who lamented poor motivation, job dissatisfaction, poor career prospect, almost non-existing training, and poor working relations with their colleagues on the other divide of the employment ladder.

Keywords: Contract staff, Employment relations, Flexibility, Labour contracting, Multinational corporations.

INTRODUCTION AND BACKGROUND

There appears to have been an increase in the marginal role played by the Nigerian oil workers within the petroleum sector (Mordi, 2008). The trajectory suggests that many of the workers have been placed on short contracts by the multinational corporations (MNCs), while fewer numbers have permanent employment status (Ajonbadi, 2015). This issue has led to tensions in the industrial relationships between and within labour contractors, their contracted staff, oil sector trade unions, the communities, the government and the multinational firms. This situation was unchecked due to deficient vigorous labour regulations and the absence of effective implementation structures, as well as other wider issues relating to the Nigerian polity (Fajana, 2011). These issues have been echoed among executive and legislative arms of the government in Nigeria, and pointed out in the Nigerian Local Content Bill, which is a bill enacted to affect and influence all work activities among MNCs in every sector, particularly in the oil and gas industry. The bill, which received presidential permission on the 22nd of April 2010, addresses contractual issues. However, with respect to employment issues, it states that Nigerians be given primary consideration for wage employment and training in any project by any operator or project promoter in the industry, among other issues.

The ultimate aim of the Nigerian Local Content Act is to increase the number of Nigerians working in the oil and gas sector and ensure job security in contrast to what has been prevalent for decades where the majority of Nigerians working in the sector are subjected to precarious contract work (Okougbo, 2010). Labour organisations in the country have consistently objected to this psychological contract and the limited recruitment of indigenous Nigerian workers; the limited leadership roles given to Nigerian workers in the oil companies operating in the Nigerian oil sector; and the general expansion of the secondary labour market through the increasing use of labour contractors and temporary workers in almost all multinational companies operating in Nigeria (PENGASSAN, 2011).

The problems associated with the lack of direct involvement and permanent employment of locals in the Nigerian oil and gas sector has attracted a hostile response from communities surrounding the multinational companies operating in the Niger Delta region of Nigeria where most of the oil exploration in Nigeria takes place (Okafor, 2007). Sometimes, Nigerian oil workers, together with communities surrounding the oil firms, have sought to use strike action, revert to the courts, vandalise oil facilities, and sometimes take foreign expatriates hostage. For example, between October and November 2006, nine expatriate oil workers – including five British men – were taken hostage (Okougbo, 2010). In November 2010, Nigerian oil workers shut down Exxon Mobil in Nigeria over the sacking of 84 Nigerian contract workers (PENGASSAN, 2011).

This study explores how the Nigerian oil MNCs use labour contracting as a strategic management tool. It attempts, in particular, to critically examine the nature of labour contracting, including how and why it is used and the implications for multinational corporations/companies (MNCs) using such in managing the Nigerian oil workers. Using empirical and analytical lenses, the study aims to understand the nature of labour contracting and its effects on the employment relationship; and this is because in the last two decades, anxieties in the industrial relations structures in the Nigerian oil and gas industry have evolved in a unique way.

LITERATURE REVIEW

Employment Relations and the Issue of Control

The contest for control of workplace processes has always been a central theme within employment relations. For instance, the employer has control over the production process, while workers also endeavour to control their labour process. However, from a contractual legal perspective, workers surrender control of their labour power to the employer as soon as the employment contract commences (Benjamin, 2013). Control in an employment relationship may generally be defined as the power to direct, determine, or constrain a person or group (Garcia, 2014). Employers have often used a variety of arguments to protect their privileges, rights and pursuits for greater control over labour processes. These arguments can be broken down into three categories. The first has to do with the need to guarantee stability and firm performance; the second concerns profit maximisation and cost minimisation; the third relates to the issue of discipline and ability to respond quickly to market volatility (Torrington and Hall, 2011; Hattons, 2014; and ILO, 2016).

The exercise of control over the workers is a means of obtaining the desired work behaviour from others. In identifying the essentials of a system of control, Edwards (1979:17-18) argues that they consist of devices 'by which employers direct work tasks; the procedures whereby they supervise and evaluate performance in production; and the apparatus of discipline and reward'. There are problems, both theoretically and practically, when one attempts to specify

what control is, how control is acquired, and how it is maintained. For Weil (2014), in order for employers to exercise control, there is an essential need for hierarchical chain of command. In their definition of control, Cascio and Aguinis (2010) argue that control can be referred to or defined as a situation by which an employer will have absolute power to provide all that the business needs and hire and fire at will as he is capable of determining and more or less controlling the way of life of the employee. No employer has such absolute control.

It is important to note that the nature of employment relationship has been described as one in which the owner of labour submits or must trade both their physical and intellectual abilities to the owner of capital of production. From inception of the relationship and throughout the existence of the relationship, the employee is subordinate (Piecherit, 2009). The employee, within this “indeterminate” and asymmetrical employment contract (Mordi, 2008), submits the ability to work for some remuneration from the employer. It becomes more obvious that the relationship is certainly not that of equals, as perceived by the legal mind. The single employee cannot match the single employer, which is a “bundle of economic resources” (Hayter and Ebusui, 2013:84). Consequently, in order to match the employer, the employees must organise themselves into a group. The coming together of the employees when bargaining with the employer helps bridge the initial wide gulf between the employer and the employee.

Generally, the ideas above resonate with Kleinknecht (2014), who argues that whenever an employee accepts an employment contract he has inadvertently agreed to comply with the instructions, rules and regulations that guide the discharge of such responsibilities; and that the employer, on the other hand, will be obliged to only give instructions that are generally acceptable to the society. What appears to be clear is that the extent to which control can be exercised depends upon the possession of power (Piecherit, 2009). However, identifying the location or who has power and, indeed, control within a management setting is not a simple exercise.

Traditionally, once a worker enters the employment relationship and agrees to offer their labour power to the employer, based on the terms specified in the employment contract, such a worker comes under the control and power of the employer. This form of power, for Galbraith (1986:216), is called ‘compensatory power’, which for him is a source of control for the employer who wins submission from the worker by the offer of an ‘affirmative reward’. However, this legal authority to control the employment relationship, which is rested on the employer via the contract of employment, does not necessarily translate into operational control over the employment relations. Management still seeks to transform the labour power it purchases into productive labour, which produces goods and services (Lee and Eun, 2016). It is in the attempt to translate this legal authority or legal contractual agreement into operational control that conflict occurs.

Strategic Internal Financial Control and the Paradigm Shift towards Flexibility

One way that multinational companies exert influence and control the structure of the internal labour market in the subsidiaries (i.e. which employee gets into the core or periphery of the workforce, and whether a particular group of labour should be homogenised via more individualistic contracts) is by controlling the financial expenses of a firm or by raising financial profit margins. There is now increasing evidence to suggest that companies, whether multi-business companies, acquisitive financial conglomerates or multinational companies (irrespective of whether they are diversified, divisionalised or decentralised), are increasingly moving towards strategic financial control systems (Serrano, 2014 and ILO, 2016). Director (2012), Rubiano, (2013) and Maurizio, (2016) spells out several features of such large firms. These include the fact that such firms focus more on short term financial gains. They are

willing to act quickly to exit from a business that they are not profiting from and are quick to replace managers, apply fiercer pressure through the monitoring process and become more effective when given acclaimed recognition for good performance.

The stress for low-cost production and more effort, productivity and profit have often come with an abdication of 'social responsibility', according to Mintzberg (1979: 424). Increasingly, managers of subsidiary firms caught in the web of corporate economic profiteering have adopted flexible policies, which give more room for the use of a typical contract worker. Oke and Idiagbon-Oke (2007) and Papola (2013) argue that this should not be a surprise – unit managers in pursuit of meeting targets are likely to use any approach that is considered cheaper and more capable of ensuring the cooperation and compliance of workers. Such experiments in the 1980s included an extensive use of temporal, numerical and financial flexibility (Atkinson, 1984). One immediate implication of this is the increasing use of "contract for service" rather than the traditional "contract of service". The importance of these categories in the employment law has great significance for the individual worker and employee under the legal employment contract (Selwyn, 1998).

The Dynamics of Labour Contracting and Flexibility Concept in Social Relations of Contract Workers

The concept of flexibility is used by firms to react either in the short or long term to certainty and uncertainty. Employers increasingly use flexibility as a control device and strategy for sustaining managerial prerogative, control of workers and their working conditions, remuneration and employment (Mordi, 2007; Kleinknecht, 2014; and Ajonbadi, 2015). Atkinson's (1984) thesis of the flexible firm is similar to the segmented labour-market theory, which suggested that the flexible firm is an in-firm divided workforce: a primary workforce whose workers are stable and skilled, having access to secure employment and prospects for career progression; while, on the other hand, the workers within the secondary segment have less career mobility and job security as they are in and out of contracts due to limited contractual employment such as short-term contracts or part-time contracts. Such workers are often poorly paid, and supposedly meant to be semi- or non-skilled workers, but are usually skilled (Battisti and Vallanto, 2016). The choice of who is recruited into this core is influenced by a number of factors – skills, job experience, education; and what Pollert (1987:16) calls 'the managerial strategic choice factor'.

There is growing evidence to suggest that the divisions and distribution of workers into the prime choice areas of the internal labour market using the flexible arrangement is sometimes done on an ad-hoc and discriminatory manner. Theodore and Peck (2013) insist that what matters to employers is the relatively easy disposability of the workers, which makes the workers more vulnerable. The situation is worse in developing economies, particularly in Nigeria, where the unemployment rate is at an alarming stage of double digits – 23% (NBS, 2015). Disposability refers to the ability of the employer to alter or sack workers in a business at a particular time (numerical flexibility) or the ability to remove and throw away occupational and skill boundaries which are long used and protected by the workers as it suits the employer.

In controlling the labour and production processes, especially the use of labour inputs, oil MNCs managers in Nigeria fragment workers in the internal labour market into primary and secondary labour markets, or what is referred to in these firms as the "core and servicing" sub-sectors. By core, they mean the full-time, permanent staff of the firms. This division is reflected in the terms of the contract, conditions of the service and the opportunities available to those

working in the same work environment who are exposed to the same kinds of risk. To achieve these divisions, multinational employers utilise a number of strategies. These strategies include the intensive use of part-time, fixed-term and short-term employment contracts (Ajonbadi, 2015). These temporary jobs are obtained through the extensive and intentional use of contracting out, outsourcing or what Nigerians call 'casualisation'. Casualisation depicts a job subject to austere employment conditions. It is generically used here to refer to both casual and contract workers, since they have more or less the same conditions of service, except that casual workers are paid on a daily or weekly basis, while contract workers are paid monthly and on a fixed-rate basis.

PRACTICAL METHODS

The research reported here is part of a wider study designed to examine the dynamics of labour contracting among oil MNCs in Nigeria. A case study approach was used in order to allow observations to be evaluated in context (Creswell, 2013). The research is based on an in-depth case study of three organisations who are major players in the oil sector. Data were collected by two methods: a series of semi-structured interviews and a survey of contract staff. Some internal company records and documents (such as contract between the user firms - MNCs and the labour contractors; letter of employment; provision of off shore labour service documents; annual certification of compliance for international consultants, contractors, agents and representatives foreign corrupt practices Act; many communiques between MNCs management and trade unions; notices of protests by trade unions; guidelines on labour administration; among others) were accessed.

Three separate field works were undertaken. 12 union officials both from the Nigeria Union of Petroleum and the Natural Gas Workers (NUPENG) and Petroleum and Natural Gas Senior Staff Association of Nigeria (PENGASSAN) were engaged in semi-structured interviews in different locations. 38 contract staff and 14 contractors across all three organisations were interviewed. A total of 64 participants were interviewed with varying degrees of responses as evidently presented in the findings. The interview questions were designed to gain an insight into individual experiences of being contract workers and the effects of such on their productivity and life outside work. The interviews were audio recorded with the permission of participants and subsequently transcribed. The data were analysed using thematic content analysis and categorisation techniques using the nVivo software package.

To validate the outcomes of the research after data have been collected through interview method, 220 questionnaires were distributed to the contract staff and 147 were returned, representing approximately 67%. No questionnaire was given to the contractors as theirs were mainly interviews.

RESULTS, FINDINGS AND ANALYSES

Types, Nature and Scope of Labour Contracting

There are two broad types of contractors in the Nigerian oil sector: a) those with a contract of service and b) those with a contract for service. When a contractor is directly recruited under the contract of service, it is usually done by the MNCs communicating directly in writing and stipulating that the multinational firm agrees to employ the labour contractor as an employee; while the other person agrees to serve the employer as an employee.

According to Shell (Nigeria) in 2008, 'Shell-run companies in the country awarded contracts worth more than \$900 million to Nigerian companies. This represented more than 90% of the overall number of contracts. It also amounts to 36% of total value. The Shell Petroleum Development Company (SPDC) and the Shell Nigeria Exploration and Production Company

(SNEPCO) employ around 6,000 direct staff and contractors. More than 90% of them are Nigerian' (Shell.com.ng). What Shell failed to state is the number of contractors employed and the number of employees on contract.

A contract of service can be in the form of a letter of appointment/employment. The employer cannot change the terms and conditions of employment unless the employee agrees to it. In other words, the labour contractor employed under the contract of service enjoys the same privileges as a permanent, full-time worker. In fact, any terms and conditions of employment in a contract of service that are less favourable than the relevant provision under the Employment Act (2004) are illegal, null and void. The provision in the Act will take precedence over a particular contractual term that is less favourable. Under a contract of service, the MNC employer must provide relevant statutory benefits such as annual leave and sick leave for its engaged employees.

A contract for service on the other hand, is an agreement whereby the labour contractor has been engaged as an independent contractor, such as a self-employed person or a vendor engaged for a fee to carry out an assignment or a project for the company. Under such a work arrangement, there is no employer-employee relationship, and the contractor is not covered by the Employment Act. However, the Local Content Bill (2010) in Nigeria emphasises the need for Nigerian contractors to be awarded more contracts; imposing severe penalties on failure to comply. It is important to note that sometimes in the oil and gas sector in Nigeria; it is difficult to distinguish a contract of service from a contract for service. Some of the factors to be considered in differentiating the two may include: who has control over recruitment, dismissal and what employees are paid? Who determines the production process, timing and method of production? Who is responsible for the provision of work, or who owns the factors of production or who provides the tools, equipment, the work place and materials? Does the person carry on business on his own account or carry on the business for the employer? Who bears the profit and /or loss?

In controlling its labour and production processes, especially the use of labour inputs, multinational oil companies investigated tend to fragment their workers in the internal labour market into primary and secondary or what is referred to in these firms as the "core and servicing" sectors. By core, they mean the full time, permanent staff of the firms. This division is reflected in the terms of the contract, conditions of service and the opportunities available to those working in the same work environment and exposed to the same kind of risk. To achieve these divisions, multinational employers utilise a number of strategies. These strategies include the intensive use of part-time, fixed-term and short-term employment contracts. These temporary jobs are obtained through the extensive and intentional use of contracting out, outsourcing or what Nigerians call 'casualisation'. Casualisation depicts a job subject to austere employment conditions. It is generically used here to refer to both casual and contract workers since they have more or less the same conditions of service, except that casual workers are paid daily or weekly, while contract workers are paid monthly and on a fixed rated basis. Casualisation has been perpetuated by the intensive recruitment of labour contractors. The available data on casualisation in the Nigerian oil and gas industry is quite informative (See the table below).

Table 1: Casual/ Contract workers in the Nigerian Oil and Gas Sector

<i>Company</i>	<i>No. of Workers on Permanent Job</i>	<i>No. of Casual/ Contract Workers</i>	<i>% of Workers on Causal/Contract</i>	<i>Total</i>
African Petroleum Plc	300	376	55.6	676
Chevron	450	3000	87.0	3450
Comex Nig. Ltd	52	150	74.3	202
Consolidation Oil	300	600	66.7	900
Devtag Drilling Co. Ltd	96	300	75.8	396
Elf Oil	42	132	75.9	174
Elf Petroleum	199	550	73.4	749
Lighthouse Petroleum	58	105	64.4	163
Mobil Oil	NIL	492	100.0	492
Mobil Producing	492	2200	81.7	2692
National Oil	51	178	77.7	229
Nidogas	15	150	90.9	165
Nigerian Agip Oil Co.	211	1500	87.7	1711
NNPC	9000	3000	25.0	12000
Remm Oil Service	120	350	74.5	470
Schlumberger Group	250	1000	80.0	1250
Shell Petroleum Development	520	8000	93.9	8520
Smithnigeria	25	80	76.2	105
Tidex Nig. Ltd	65	120	64.9	185
Total Nigeria Ltd	136	534	79.7	670
Trans Pecan Sedco Forex	50	150	75.0	200

Source: NUPENG, 2003

A study of foreign multinational companies in the Nigerian oil and gas sector in 2001 pointed out that the oil sector is built on a secondary workforce. For instance, Mobil had 492 workers who were employed on open-ended contracts, while it had 2,200 casual workers in 2001, (Eppah, 2001). The same situation is replicated in Chevron where 450 workers were employed in the core of the firm and 3000 as contract workers; also the Schlumberger Group has 250 workers in the core of the workforce and 1,000 workers in the periphery. Shell had 93.9% of her employees on contract with 8,000 people on such 'precarious employment' and only 520 have full time job. The Nigerian National Petroleum Corporation (NNPC) which is run by the federal government with the tax payers' money is the only one that hires more workers on full time employment than those on contract. This above table represents the atypical employment pattern prevalent in the oil industry by the MNCs.

Labour and service contracts are terms used by the management of MNCs to describe contract labour. Management sometimes refers to it as "Body shop" or "Direct hire", while others refer to contract labour as service providers (Ajonbadi, 2015). Once employed, the contract staff in some companies is made to sign the Yellow Dog contract. The yellow dog contract is a compulsive undertaking not to join the union whilst in employment. These nomenclatures are being used to describe contract labour to inject internal contradictions (Adenugba, 2004 and Okougbo, 2010).

Job Satisfaction and Employee Motivation

One of the major challenges facing line management and the HR function is the motivation of employees. Pilbeam and Corbridge, (2010) suggest a critical link between job satisfaction and motivation on one hand, and productivity and profitability on the other. In order to understand how labour contracting is employed as a control/managerial mechanism in the oil sector in Nigeria, one of the questions posed to contract staff was on job satisfaction and their level of motivation. A major theme that emerged on this subject revealed that employees on contract

generally did not express overt opinions and suggested that their jobs exist to satisfy their basic physical and social needs. A participant in one of the organisations investigated with the 'Meet and Greet' Unit claimed that:

'I am only motivated to work as it is the only way to feed my family and pay my children's school fees. The conditions surrounding my work are depressing and de-motivating but my choices are limited'

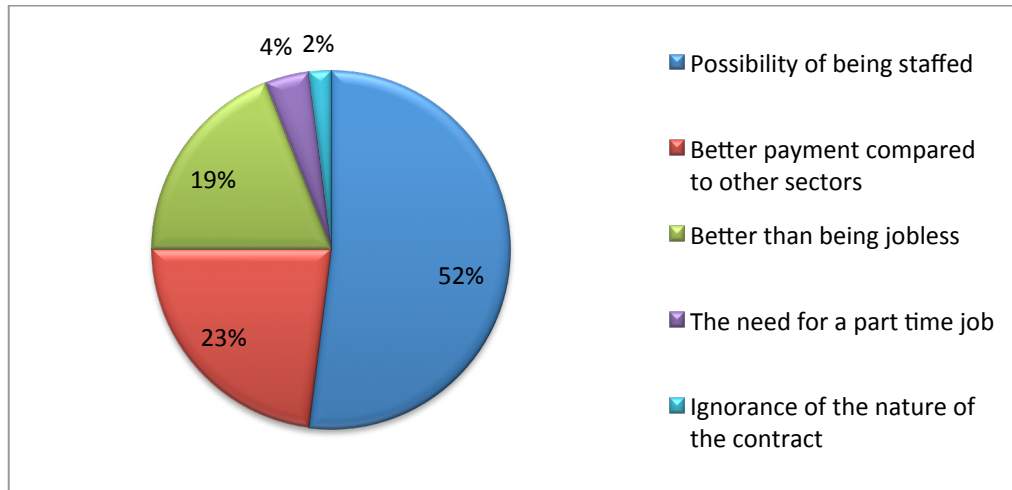


Figure 1: Reasons for contract jobs

When employees on contract were confronted with the question of why they accept contract jobs, 52% claimed their attraction came from the possibility of getting converted to permanent employment; 23% claimed that the pay is better than permanent jobs in most other sectors; and 19% said it is better than no job at all. 4% said they need the jobs on temporary basis; and another 2% claimed ignorance of the nature of the contract at the beginning.

While majority of the respondents of this survey asserted that their motivation comes from the hope that they will be converted to permanent staff one day; evidences abound that on rare occasions will such conversion happens, and it is usually at the discretion of the user-firm (the MNCs). This was confirmed by most of the contractors during the interview, and it was well summarised by one of the contractors who asserted that:

'It does happen that a highly valued employee on contract is requested by the third party (user firm) and necessary arrangements will be completed in terms of paper work to have such contract workers converted to permanent employment'.

When these views are placed in context, it can be argued that contract workers in the organisations do not view satisfaction and motivation as an important part of their work life. A reason for this within the national context as identified by Okafor (2007) is the high rate of unemployment which leads people to jobs in which they do not feel motivated but engaged in to satisfy their economic needs.

Employees were also asked about the level of influence they exercised over their jobs and tasks. In particular, contract employees expressed strong opinions about having to defer to less qualified and experienced colleagues on open-ended contracts simply because they were on fixed-term and casual contracts. One employee from the logistic unit of claimed that:

“Decisions about the maintenance of machines and replacement of parts are taken without reference to the operators of the equipment”.

In doing this, the management deprives employees of a voice and restricts their input into the production and work process while seriously compromising occupational health and safety. This is similar to the findings of Battisti and Vallanto (2013), which found a link between flexibility and employees’ perceptions of job quality. By reducing employees’ involvement in their work, management unwittingly reduce their levels of motivation and morale leading to a further drop in productivity which defeats the business case for flexibility.

Compensation policies may motivate and satisfy employees through incentive plans or may harm motivation and satisfaction through insufficient raises or salary freezes (Adam-Smith, 2009). The motivation and satisfaction of employees could act as feedback on the organisation’s quality of work life, and possibly improve the human resource department’s day-to-day employee relations activities (Lee and Eun, 2016 and ILO, 2016).

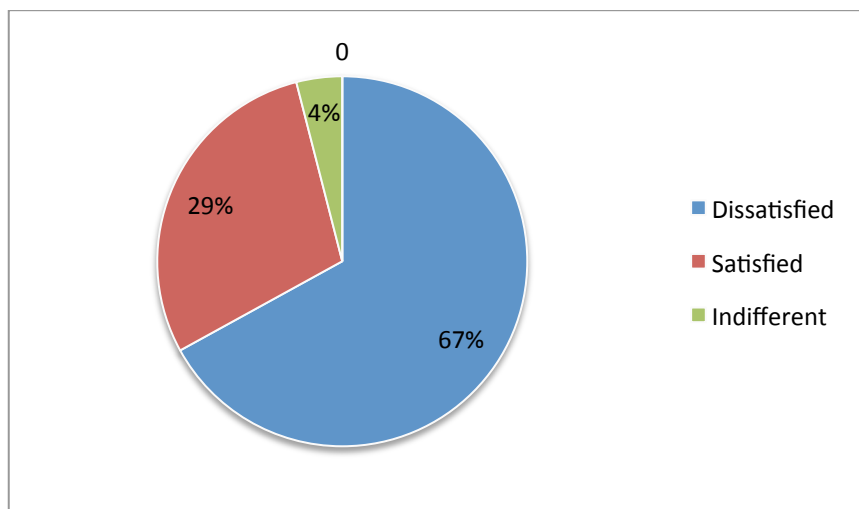


Figure 2: Job satisfaction

About 67% of the employees confirmed their dissatisfaction with their work, with about 29% expressing satisfaction, whereas the remaining 4% were indifferent. Marchington and Wilkinson (2006) point to a link between flexibility and declining motivation and morale among contract workers. The 2006 attitude survey by the PENGASSAN union in the Nigerian oil and gas industry reveal a high level of job dissatisfaction among contract workers, with 69% of workers surveyed expressing dissatisfaction with their work (PENGASSAN, 2006). This is consistent with the findings of this research and the critical analysis of literatures.

It would seem logical to assume that job satisfaction should be a major determinant of an employee’s ‘organisational citizenship behaviour’ (Reiche et al, 2009: 48). Satisfied employees would seem more likely to talk positively about the organisation, help others and go beyond the normal expectations of their jobs.

Another contract staff member in the Information Technology Unit said:

‘I used to give my best when I joined this organisation five years ago as a contract staff, hoping my condition of service will improve, or at least match those of my colleagues on permanent employment. This has not happened, as the margins between us widen and my spirit is dampened because it is a case of monkey dey work, baboon dey chop. I mean, we the contract staff do the work, while permanent staff enjoys the rewards’.

Basically, job satisfaction is influenced by the conceptions of fair outcomes, treatment, and procedures (Martin and Fellenz, 2010). Thus, if an employee does not feel his/her supervisor is fair in the treatment being meted out to him/her, or the organisation's procedures are perceived to be unfair, or pay policies are unfair, then, job satisfaction will likely suffer. But when an organisation's processes and outcomes are perceived to be fair, trust will likely develop, and this will in turn lead to employee's commitment (Budd and Spencer, 2014).

Career Mobility and Prospect

In recent years, career planning and development have gained more ground than ever as more proactive career-related efforts have been intensified. Thus, some organisations provide career education, information, and counselling (Borghans and Golsteyn, 2006). However, it is often emphasised that the primary responsibility for career planning and development rests with the individual employees. The planning process will enable employees to identify career goals and the paths to them; then, through developmental activities, the workers seek ways to improve themselves and further their career. Individual efforts include good job performance, favourable exposure, leveraging, and the building of alliances.

Another key characteristic of 'core' jobs among the MNCs in Nigeria is the fact that those on permanent employment enjoy career mobility. Career mobility refers to workers being rewarded for performance through its internal labour-market mechanisms to move from a lower position to a higher one (Marginson, 2015). This issue segregates, differentiates and segments those workers in permanent employment and those on contract. For instance, a project engineer with one of the organisations studied pointed out that:

'Since we contract workers are recruited into the company through contractors, we are not entitled to promotion.'

The respondents lamented the lack of motivation in the absence of career mobility, as a staff member in the operations department claimed:

'I really wish I could get another job, even if it is in the public sector that pays poorly, because at least I will know that I am advancing in my career and I will get promoted every year and will ultimately have something to look forward to for retirement'

Slow growth and restructuring through downsizing have eliminated many career opportunities for otherwise good, hardworking employees (Rubiano, 2013). Simply put, many people have found their career stalled through no fault of theirs. As most of the oil MNCs in Nigeria have scaled back their levels of middle management and staff through the use of contract staffing arrangements, finding career advancement opportunities outside the firm entails considerable competition from others.

One of the contractors confirmed the challenges that come with career mobility to the contract staff while gauging them with the permanent staff:

'It is a pitiable situation because I know that some of the permanent staff whom the user firms are spending money on have reached their career plateau beyond which they are not capable of advancing even with training but they still get more opportunities when compared with contract staff who are still full of ideas and energies'

Barrientos (2011:86) argue that contract workers are plagued by the fact that 'mobility across the boundary of these sectors is restricted, and higher paying jobs are tied to promotional or career ladders, while lower paid jobs offer few opportunities for vertical movement'.

Training and Development and Acquisition of Skills

Competent employees do not remain competent forever. Skills deteriorate and can become obsolete (Salas et al, 2012). This is why organisations spend millions per year on formal training. Employees with self-efficacy have strong expectations about their abilities to perform successfully in new situations. They are usually confident and expected to be successful (Neuman, 2014). Thus, training is a means to positively affect self-efficacy because employees may be more willing to undertake job tasks and exert a high level of effort.

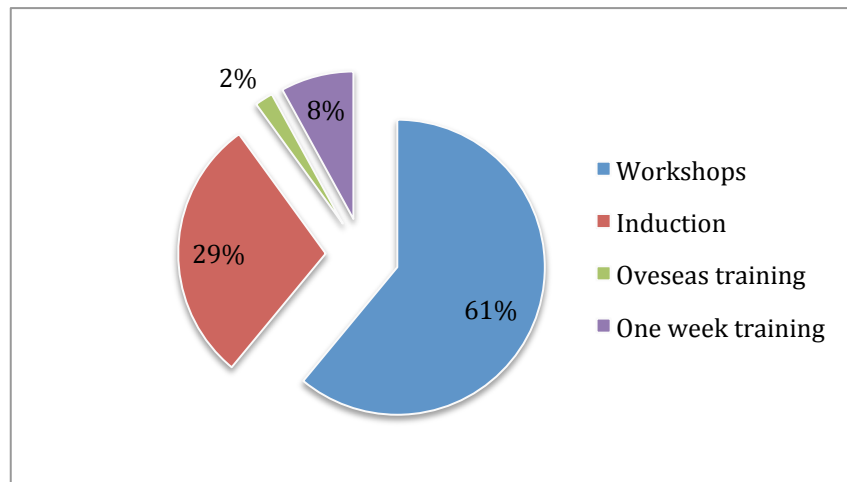


Figure 3: Nature of training

It appears safe to state that training and development are key requirements to retaining a highly skilled and talented workforce. In the case study organisations, respondents were asked how regularly they receive training, the nature of the training and duration, and who bears the financial implications (the contractors or the third party – MNCs). From the survey reports, 61% of the respondents claimed they are only exposed to one-two day workshops usually run in-house. Another 29% claimed all they have had was the induction at the start of the work. It is important to mention that, on reviewing the questionnaires, majority of those in this category were those who have spent less than a year with the organisations. Interestingly, about 2% claimed to have had one or two overseas training courses at the expense of the user firm. However, on review, it was observed that all of those in this category have been working as contract staff for over eight years. The remaining 8% claimed to have only had one week of training.

Another respondent from the Information Unit claimed that:

'I always find it plausible to comprehend when I see the management sending our colleagues on permanent contract to training and leaving us out, yet they expect the same performance. It is crazy, but what can you do other than train yourself. I am now doing my MBA (at my own expense) just to remain competitive and relevant; whereas, I have my mate on the other side of contract who is being sponsored by management'.

This creates a group of employees with only basic skills to carry out the simple tasks required in their job roles. From one of the interviews with a contractor, it was revealed that the company saw:

'It as a drain on resources to send peripheral employees on training courses when you are not sure you will retain him/her. If care is not taken, you will be training such person(s) for your competitors.'

The above resonates with one of the findings from Mordi (2007), who suggests that multinational organisations create a segmented workforce within the workplace. Peripheral employees end up using existing skills to improve the competitive advantage of the organisation while gaining little new knowledge in the process. As the attitude survey by PENGASSAN (2006) shows, employees on contract rated training has the second most important disadvantage in comparison to their core colleagues.

A contractor that works for two of three organisations investigated supported the claim that the user-firm is largely responsible for the training of contract staff:

'I know for sure that my clients (the user-firms), focuses training concept on individual employees as they believe that all employees, regardless of salary grade, position or nature of contract, can benefit from quality training. They have four phases of training, depending on the employees' department. The first includes an extensive orientation programme for new employees and on-the-job training for those who have transferred to a new job. The second phase is departmental training. Hourly and management employees receive specialised courses that are intended to increase departmental productivity. The third phase is plant or facilities training. Safety training and courses for personal or professional development are included in this category. The final phase is corporate and outside training and development. It includes training and development efforts made by corporate offices, private consultants, and universities. These are courses that are more general and developmental in nature, forming the backbone of employees' efforts at continuous learning.'

In reaction to how the managers of the organisations studied are re-evaluating skills in their Nigerian subsidiaries, the NUPENG national secretary called on the Nigerian government to revoke the contracts with multinational companies that refused to use Nigerian fitters and welders in executing their jobs. The union singled out Indian, Filipino and Chinese welders and fitters that were increasingly becoming recipients of outsourced jobs in the oil and construction industries in Nigeria (NUPENG, 2010). Some have argued that it would be a mistake to think that core workers are necessarily the most highly skilled workers or the most relevantly skilled workers to a firm's needs. Atkinson et al. (1984: 59) argued that 'with some exceptions, employers are becoming pragmatic and opportunistic, taking advantage of current weak unions and high level of unemployment'. Again, loose legal and labour policies in Nigeria are contributing to the current challenges as it makes it easier for employers to choose who they want to place in the core or peripheral segment (Okougbo, 2010).

Theodore and Peck (2013) and Serrano (2014) argue that employers will normally embrace the logic of flexibility, as it affords them the ability to rename or redefine core and peripheral skills. It is now commonplace that skill is socially constructed as semi- or unskilled, and may not be rewarded by the advantages of an internal labour market, such as pay, promotion prospects and other non-wage benefits. For Pollert (1987), this dilemma is a conceptual problem that weakens the notion of a core segment. She argues that the characteristics of the core segment are not always as fixed as commentators of the dual labour-market theories proffer.

Working Relations among Colleagues

The network of interpersonal relationships in the workplace, resulting from the use of flexibility is one dimension that has not been addressed in earlier studies and literatures. In order to understand how employees perceive their relationships in the workplace, they were asked what the relationship between them and their colleagues on permanent employment was. This question revealed inherent tensions in their relationship. The contract employees who responded had the perception of being treated as second class citizens by members of the core workforce. A striking response in this regard came from an employee from the Logistic Unit:

'They (permanent staff) see us as their errand boys, even though in most cases we are more qualified than them; they delegate tedious and meaningless tasks that ordinarily are not part of our job role.'

Another contract staff member furiously responded to one of my questions on the working relationship and said:

'Listen, I am not a dropout, I have two masters: one is MBA (Operations Management) and the other is MSc. in Chemical Engineering. I am, however, treated like a steward or a beggar. My contract terms stipulate that I do all the work as a normal worker here but I am seen as a mere 'body part'. This is only happening because the Nigerian government has allowed it. This causes a lot of human and work discontent. Some of my colleagues have taken this badly.....sometime we have even fought physically and beaten permanent workers who have mistreated us.'

This creates problems, especially when work groups are structured around teams comprising core and peripheral staff, and presents a serious managerial challenge at line, middle and top management levels. Team building utilises high-interaction group activities to increase trust and openness among team members. The activities considered in team building typically include goal setting, the development of interpersonal relations among team members, role analysis to clarify each member's role and responsibilities, and team process analysis (Allen, 2006).

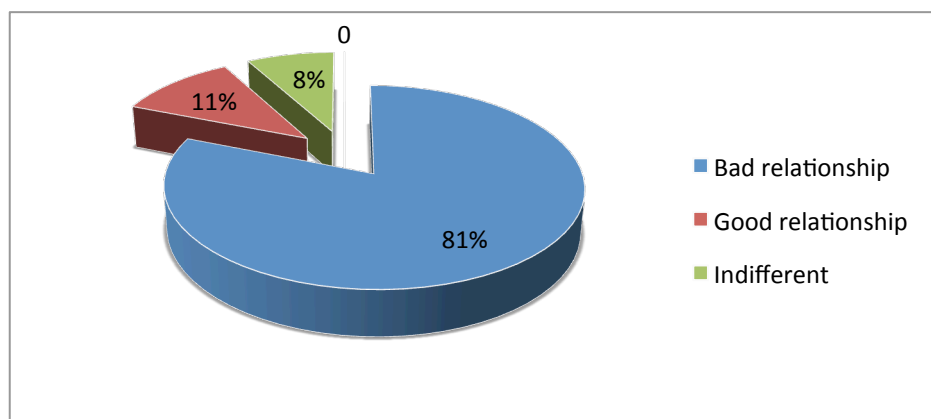


Figure 4: Working relations

When respondents were confronted on the cordiality of their relationship with permanent employees; 81% of them agree that they do not have good relationship, as hostility and animosity seems to characterise the work environment within teams. Only 11% attest to having good relationships, with 8% stating that they cannot be bothered.

Okafor (2007) suggests that an internally segmented workforce is to the employer's advantage given the industrial and natural context. The fear among employers in the Nigerian oil industry is the instability that may be caused by collective action of employees united in purpose to push for better employment terms and conditions. For example, it was revealed in this study that only core employees are allowed to be represented by unions. A peripheral employee's contract, a copy of which I reviewed, explicitly precludes them from taking part in any union activity. This is also a core issue that has been campaigned against by both the NUPENG and the PENGASSAN. As a result of union pressure, contract staff are now allowed to join 'staff associations', which have no real bargaining power when it comes to terms and conditions of employment. Kleinknecht (2014) and Serrano (2014) found out that flexibility within the labour process poses serious implications for collective bargaining. Segmentation produces vulnerable groups of workers who suffer inferior terms and conditions of employment and have no voice or medium to influence management. The fact that the management of the MNCs have overtly made obvious the dichotomy between the tenure staff and the contract staff have increased mounting tension between the two groups of workers. One of the contract staff in the Information Technology department mentioned that:

'It is not uncommon to find out that there is cold war within our rank and file. We know they don't like us, and we also don't really like them, especially some of them that see this place as their birth-right. It is sad because I believe there shouldn't be "them and us" when we are all supposed to be working for the same goal.'

Another participant in the Security Unit claimed that:

'You know fighting in an organisation premises is considered to be a gross misconduct act, but I will be honest with you, I have been so frustrated by some of them that I feel like punching them. That's why when I have a social function, I don't invite them, I only invite my fellow contract staff, they are the ones I can trust and discuss freely with.'

There is a consensus among workers, union officials and scholars that the pursuit of a large secondary workforce via precarious employment contracts for reasons of profit or control has come with a cost (Kallerberg, 2011). Non-cordial relations at work have been an issue that has come with the high use of insecure workers (Hastings, 2012). Clearly, a major area of concern in organisational development is the dysfunctional conflict that exists between groups. Intergroup development seeks to change the attitudes, stereotypes, and perceptions that groups have of each other (Jackson, 2002).

There is a need for management to know that since contract staff can sometimes help employers to benchmark and improve their practices, they (contract staff) are perceived as a potential threat by the permanent staff. This is in line with the survey conducted in the US where 33% of full-time employees perceive the temporary staff as a threat to their own job security (Procter and Ackroyd, 2006). In attempting to convince permanent workers that they are valued and not about to be replaced by contract workers, the organisation must not create a perception that contract workers are second class organisational citizens. Thus, the organisation should treat the contract workers the same way it treats permanent workers.

DISCUSSION

Oil and gas unions have stepped up efforts to advocate the enforcement of laws on labour contracting. They have also become more aggressive in organising contract workers. Since many contract workers in the oil and gas industry work alongside union colleagues, increased

hostility and tension were found in the course of this study. The two unions - the NUPENG and the PENGASSAN, claimed to have begun monitoring their employment terms (NUPENG bulletin, 2012). According to the law, if 50% or more of non-union employees ask to join NUPENG or PENGASSAN, the unions can then set up a committee to begin negotiations with the employer (Ariweriokuma, 2009). This study found that this has not really happened as the process often gets bogged down in legal details. The MNCs often shift bargaining responsibility from one sub-contractor to another, delay negotiations, try to pit unions against one another, or even resort to physical attacks (Agomo, 2012). However, unions are increasingly willing to “go to the mat” on the issue of freedom of association for contract workers.

Until the cause of workers’ rights is fought among and for a broader audience, oil workers in Nigeria will continue to find themselves isolated in their attempts to counter the degradation of work. Observations that are commonly made are attributed to the following instances: where employers cannot see contract employees as co-pilots in the quest for the attainment of organisational objectives; where employers do not believe that what it wants and what contract employees want are identical and harmonisable; where employers see contract employees only as the cost of production which must be eliminated wherever possible; where employers allow contract employees (“rank and file”) to see fear, distrust, suspicion, insecurity and the love of secrecy as a norm in the organisation; where employers are afraid of losing their prerogative if it gets contract employees involved in the solution to organisational challenges; where employers feel insecure if contract employees have excellent knowledge of the organisation issues, and could offer exceptional solutions; where employers naïvely believe that there are certain facts about the organisation that the contract employees do not need to know; and where employers do not factor contract employee’s concerns as an organisation concern (Fajana, 2011 and ILO, 2016).

On the other hand, the employees need to change their mentality and orientation about their employer being responsible for the challenges confronting the Nigerian economy. The MNCs should be appreciated as investors with clear objectives to maximise profit. They should be encouraged and appreciated as job creators, and it should be understood that they cannot solve all of the economic problems of the country (Mordi and Mmieh, 2009 and Ajayi, 2011). The contract employees must understand that their contract terms and conditions are unequivocal in most cases and it should be clearly spelt out what their working terms and conditions are; all of which they should accept. Thus, an attempt to change the rules in the middle of the game will not be in the interest of anyone. They should, therefore, stop claiming marginalisation and discrimination, when they are aware of the terms from the onset.

CONCLUSION

As corporate use of labour contracting business model increases, its potential to deepen the divide between workers and communities becomes more corrosive. Oil unions will no doubt continue their aggressive efforts to stop labour contracting through collective action. But the most complex challenge for these unions is to turn the battle against labour contracting into a movement for redeeming the original promise of meeting members’ expectations. How the oil unions go about this remains to be seen, but it is clear that their efforts to counter labour contracting are directly tied to their long-term capacity to bring social change in the country.

Success will largely be measured by the oil unions’ ability to ensure that new oil sector jobs have better career mobility, training and development, job satisfaction and improved working relationship among colleagues. The rule of law should be advanced, not only by promoting labour law enforcement, but also by helping communities hold government leaders accountable, by using their broad political strength to bridge the economic gap between those

on the inside of Nigeria's oil economy and the many clamouring for work on the outside, by calling for higher wages and the freedom to join trade unions.

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The Impact of Management Objectivity in Jordanian Shareholding Companies on Audit Planning and Evidences Collection

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Abstract

This study aims to identify the impact of management objectivity in Jordanian shareholding companies on audit planning and evidences collection from the viewpoint of Jordanians auditors, and whether there are statistical significance differences of those effects due to the experience of the Jordanian auditors. To achieve the objectives of this study, the researchers have designed a questionnaire to collect data of the study, where the study population consisted of (327) auditors practicing the auditing profession in Jordan as at the beginning of year 2016 (According to Statistics of Jordan Association of Certified Public Accountants (JACPA) in 1/1/2016). The study sample's size has reached (115) auditors which representing 35% of the study population. Results of the study include: There is a high impact for management objectivity in Jordanian shareholding companies on audit planning and the evidences collection from the perspective of Jordanians auditors, the lack of statistically significant differences for management objectivity's impact on audit planning and evidences collection due to the experience of the Jordanian auditors. The researchers presented many recommendations, including: to send more requests to use external experts, to pay more attention to contribute to the implementation of the required professional services effectively, especially in the case of doubt or signs of non-management objectivity of the company in the subject of the audit, to strengthen the keenness of the auditor to increase control actions on evidence audit and examine the sequence of implementation and the adoption of evidence that is collected when there is doubt or signs of lack of objectivity in the management of the audited company.

Key words: management objectivity, Jordanian shareholding companies, audit planning, evidences collection.

INTRODUCTION

Not surprisingly, Nations knowledge level and their progress and success are measured according to the spread of the culture of planning in all of life aspects, whether cultural, economic, scientific, social or political. The best proof of this is that we find countries that have become at the forefront of the world's industrially and economically in a short period of time after their economies destroyed completely by wars, poverty and the problems of population growth, and that through the spread of planning among societies, which became at the forefront of the global nations industrially and economically, for example Far East countries

from Japan and South Korea, passing through Malaysia and the end of China. And to find countries that have maintained political, scientific and military progress due to the culture of planning and subsequent spending is not limited to scientific research based on the need to survive in the forefront of the world in all fields of life, for example the United States, United Kingdom, France and Germany and to find very small countries that hardly appear on the world map has become the forefront of global states in the media because of a planning culture based on advanced scientific studies.

And to confirm the importance of planning in the career of the auditor, the International Auditing Standards Committee developed special planning standard setting out the main points of the audit planning in order to understand the client's business for audit purposes whether from previous experience or knowledge of the available sources.

The Committee also stressed the concept of materiality and the impact of deletions and distortions in the financial statements on economic decision and the importance of knowing the concept of audit risk and the use of it during the planning process.

There is no doubt that there is a correlation between risk assessment and audit planning, suggesting that auditors adjust their decisions about the audit evidences based on the management objectivity and creditability.

If the primary purpose of auditing the financial statements to give a neutral professional opinion about the fairness of the financial statements, the auditor is required to follow a number of procedures which are a set of steps determined in advance in the planning stage, and the organizers are committed in the auditing profession to apply accepted international standards and recognized at the local and international level.

The American Institute of Certified Public Accountants (AICPA) has enjoined (The first section of field sections) the need for adequate planning for the audit process. The impose of (Sarbins Oxlyand Particularly section (404) thereof to emphasize the need to assess and report on the credibility of the client and management objectivity, resulting in increased information available to auditors in the planning of the audit process and decision-making.

The basis of management objectivity and integrity of the importance of the work of the auditor, this study aims to identify the impact of the management objectivity in the Jordanian shareholding companies on the audit planning and evidences collection needed to complete the audit requirements from the viewpoint of Jordanian auditors.

IMPORTANCE OF THE STUDY AND ITS OBJECTIVES

The study gains importance from a set of points; it can be summarized as follows:

- ✓ That the planning for the audit process and the collection of appropriate evidences is one of the important stages that must be performed by the auditor and give it necessary attention before starting the audit process as it will help in predicting the potential and important problems before admission or readmission of the audit stage, and this is what achieves efficiency in the process of audit carried out.
- ✓ The planning has a big important in enabling the auditor to collect the audit objective evidences, and what is revealed by the results to the auditor before accepting or readmission the audit of the accounts of the client process and determine the fees arising from the acceptance of auditing and the degree of risk that the audit process could face.

- ✓ The objectivity of the company's management in the Audit subject has a significant impact on the auditor's plan for the audit process and gathering sufficient audit evidences that is necessary for the audit process, which requires highlighting them in the field of scientific studies.
- ✓ This study is one of the few studies (if not the first) that connects between the objective impact of the company 's management of the audited plan of the audit process and the collection of audit evidences from the perspective of Jordanians auditors, and the impact on competition between Jordanian auditors sector at the local level and regional levels, which should be kept in the mind of those who support it, success in the competition must be based on the submission of outstanding universal quality of services and the ability to keep pace with developments and to keep up with future aspirations, which requires efficient planning of the audit process and ensure the collection of an effective audit evidences.

Hence the importance of this study, the researchers seek through which to identify the impact of management objectivity in Jordanian shareholding companies on audit planning and collect audit evidences necessary from the viewpoint of Jordanians auditors.

It can address the objectives of the sub study based on the following points:

1. Identify the objective effect of the management in the Jordanian shareholding companies to plan the audit process from the viewpoint of Jordanian auditors.
2. Explain the impact of the management objectivity in Jordanian shareholding companies on evidences collection from the perspective of Jordanian auditors.
3. Clarify whether there are statistical significant differences (at the 0.05 significance level) for the impact of management objectivity in the Jordanian shareholding companies on audit planning from the viewpoint of Jordanian auditors attributed to the experience of the Jordanian auditors.
4. Examine whether there are statistical significant differences (at the 0.05 significance level) for the impact of management objectivity in the Jordanian shareholding companies on evidences collection from the perspective of Jordanian auditors attributed to the experience of Jordanian auditors.

THE PROBLEM OF THE STUDY

Since the main objective of the audit of financial statements by the auditor is to express an artistic neutral opinion about the fairness of the financial statements, the auditor is required to follow many of the procedures such as planning the audit and collection of audit evidence and establish a work program, and through the data available in the company for audit purposes and the cooperation from the company's management and its employees to obtain a convincing evidence to reach a neutral technical opinion. However, the lack of objective company's management and its desire to influence the course of the audit process may prevent (or delay) the auditor 's mission as required, so the auditor seeks to ensure the objectivity management before placing the action plan and determine what the nature of the audit evidence collected more final.

From here the researchers can say that the main problem of this study is to show the impact of management objectivity in Jordanian shareholding companies on audit planning and collection the necessary evidences from the viewpoint of Jordanians auditors.

The study problem can be formed through the following sub - questions:

1. What is the impact of management objectivity in Jordanian shareholding companies on audit planning from the viewpoint of Jordanians auditors?

2. What is the impact of management objectivity in Jordanian shareholding companies on evidences collection from the perspective of Jordanians auditors?
3. Are there statistically significant differences (at the 0.05 significance level) for the impact of management objectivity in Jordanian shareholding companies on audit planning from the viewpoint of Jordanians auditors attributed to the experience of the Jordanian auditors?
4. Are there statistically significant differences (at the 0.05 significance level) for the impact of management objectivity in Jordanian shareholding companies on evidences collection from the perspective of Jordanian auditors attributed to the experience of the Jordanian auditors?

THEORETICAL FRAMEWORK

The expansion in the scope of companies, growing in economic processes, multiple accounting treatments and the multiplicity of legal requirements and the requirements of international accounting standards led to a high difficulties and complexities in the work of accountants, which necessitated those accountants to have highly qualified skills and variety skills, and those difficulties and complications may be a cause of some errors in accounting operations and financial statements and reports prepared by the accountant.

So it was necessary for those operations and the financial statements and reports to be audited by an independent external auditor to satisfy the needs of users of these lists and reports access and to assure an acceptable and reasonable level of quality.

Also many researchers refer (Arens et. al., 2014, AL-Thuneibat. 2012) to the existence of many of the factors that led to increased demand for audit from an economic point of view, including: the desire to reduce the risk of information, reducing the cost of capital and to assist in Preventing errors and material misrepresentations occurrence as much as possible.

Planning for the audit process and its phases: In order to accomplish any task effectively; advance and good planning for this mission is required and the audit process of the tasks require necessarily to perform good planning process through the development of an examined and comprehensive audit strategy to the scope of examination and evidence, and the translation of this strategy in the form of a program that includes steps and procedures necessary to implement the audit function to ensure efficient implementation and ultra - professional care.

If the planning general concept means to translate the goals into executable program of work; the planning process for the audit means "to develop a strategy for the audit work plan in order to reduce the risk of this work to a low level is acceptable" (Alshohna, 2015, 135).

(Al-Thuneibat. 2012) indicates that the planning for the audit process is one of the important things in the audit process, which is one of the international auditing standards issued by the American Institute of Certified Public Accountants, and emphasizes that the most important things that will help the planning of the audit process to achieve include: auditors' judgment on the size of sufficient and suitable evidence which can be obtained in the audit stage, directing the auditor of the resources available to carry out the audit process properly so as to achieve efficiency and effectiveness through rationalization audit costs, clarify the necessary things and responsibilities before starting the audit process so as to minimize the chances of disagreements occur between the audit office and those in charge of the company in the subject of audit.

The planning process affected by a variety of factors, including: the size of the audited entity, the complexity of the operations of the audited entity, the former auditor's experience, the size of the necessary audit evidence and management objectivity and how to provide the necessary facilities for the auditor to carry out the audit.

And the planning process to go through the process of checking multiple stages, the researcher can summarize it as follows:

- ✓ First stage: to do the initial planning procedures: These procedures designed to assist the auditor in identifying targets and risks that may affect the preparation of the audit plan and work to be reduced to a minimum, the initial procedures for planning include the following: Admission or readmission of audit and preliminary assessment of the audit task, understanding the client's needs to provide auditing and conditions of service fees and preparing the engagement letter, the development of business strategy and the appointment of the audit team.
- ✓ Second stage: get a reasonable degree of knowledge and understanding of the nature of the customer's business: This phase aims to identify the nature of the customer's economic circumstances surrounding the company's audit position, and know the basic characteristics and judge the overall level of management efficiency and objectivity of activity, and understand the accounting system and internal control system applied in the company. An auditor can achieve this stage through field visits to the company by conducting interviews with official employees of the company and the employees of the audit to get the information directly, and access to documents and minutes of meetings and the statutes and articles of incorporation and other documents to obtain information indirectly.
- ✓ Third stage: to determine the initial levels (relative importance) of the materiality and assessing audit risk: ISA No. (320) (issued by the American Institute of Certified Public Accountants) defined materiality (relative importance) as the amount of omissions or distortions in the accounting information or financial statements, which can lead to changing the appropriate decision for users of this information or data or influence the result due to omission or misrepresentation. And it refers to the same standard that the information is of relative importance if deletion or false presentation may affect the economic decisions of the users of this information, and the relative importance depends on the item or estimated error in special circumstances due to deletion submitted wrongly.

At this stage, the auditor determines the materiality level by quantity and quality, and to estimate the audit risk and its impact on the acceptance of the task of checking whether or not to accept, and if accepted what its impact on the results of the auditor's report. This means determining the amount of allowable error in the financial statements where auditor who allows its presence even when issuing an unqualified audit opinion. To determine the amount of allowable error in the financial statements, the auditor must take into account: the amount (quantity) and nature (quality) misinformation that may find in the financial statements (such as prescribing an inappropriate policy of accounting followed by the company so as to mislead users of financial statements), the extent of material misstatement represents the relative importance of the financial transactions and account balances and disclosures.

- ✓ Fourth stage: the design of the audit plan and the detailed program of the audit: Audit plan concludes program which will be followed by the auditor in auditing the books and records and the content of the data, and the steps to be taken towards the implementation of the audit process, and the time to finish each stage of the audit process and the person responsible for implementation represent.

In designing the audit program, it is incumbent on the auditor to take into account the scope and limits of the test, and determine the level of the tests in the light of the results of examination evaluation of the internal control system and identify desirable goals to achieve in each step of the audit program objectives, and to ensure that the maximum amount of audit evidence collected so that the audit program can be flexible and realistic and updated if circumstances required so.

Audit evidences and its adequacy and relevancy: The auditor should obtain sufficient and appropriate audit evidence to reduce audit risk to a minimum level of risk accepted and to get a reasonable assurance that enables the auditor to express a technician neutral opinion.

ISA No. (500) defined audit evidence as "all information used by the auditor to reach conclusions that builds upon his opinion in the audit process, and include the information contained in the accounting records underlying the financial statements and information from other sources, such as approvals and the results of inquiries and reports of financial analysts and data comparison and others".

The researchers believe that the audit evidence must be characterized by two essential features which are appropriateness and sufficiency. Appropriateness feature can be achieved in the audit evidence if it has the following: Evidence is linked to audit purpose, confidence in the evidence which affects the nature and source of obtaining evidence.

According to the literature (Arens, et. al., 2014; Alshohna, 2015) that there are some fundamentals that lead to increase confidence in the audit evidence, and thus increase the reliability of, such as:

- Independence of the party who provided the evidence related to the audit.
- The effectiveness of the internal control system in the company that subject of audit.
- Obtain audit evidence directly through actual observation or examination or re - calculation performed by the auditor personally.
- Obtain audit evidence at the appropriate time; Access to evidence in the history of not commensurate with the date of the inspection guide loses its relevance.
- Qualifications of provider of the information and its accuracy and reliability of the information it provides.
- The degree of objective evidence and not its components rely on judgment and personal judgment.

The adequacy of the audit evidences are related to the quantity of evidences required by the auditor collected to perform the audit, depending on experience and professional judgment in this area. And the adequacy of the audit evidences affected by a range of elements, including (Qaysar .2014; AL-Thuneibat. 2012):

- ✓ The relative importance of the element, where commensurate quantity of audit evidences directly positivly with the relative importance of the element, a higher relative importance of the subject of an audit will increase the quantity necessary audit evidences provided.
- ✓ The degree of risk posed to the element, where the quantity of audit evidences commensurate with the degree of risk, the higher probability of desired item for audit exposed for fraud and embezzlement the higher the auditor will seek to collect more audit evidence.
- ✓ The cost of obtaining evidence, which is expected that the quantity of audit evidences negativly related with the cost of obtaining evidence, because the auditor performs a

benefit and cost analysis of evidence, and he has to strike a balance between the desired benefit on one hand and the cost factor on the other.

- ✓ The efficiency of the internal control system, with proportional quantity of audit evidences negatively related with the degree of efficiency of the internal control system, proper and accurate internal control is an indicator of organized accounting systems and books, which will reflect on the quantity of audit evidences and the quantity of testing and the size of the sample that is chosen by the auditor.

The researchers believe that the multiplicity of sources to obtain audit evidences is the source of strength and confidence and security of the auditor to check the integrity of the data, which is audited in order to reach an impartial professional opinion about the safety of the financial statements data to the company the subject of audit and they reflect the reality of the company position honestly and fairly.

Management objectivity and its importance in the audit process: The term objective (synonym transparency) one of the commonly used terms in the present, on the economic, social, cultural, political and educational level, objectively seen as linking actions to words, and transparency in the language means thin thing that does not darken what behind it and sees through it and it's the opposite of opacity and secrecy, and perhaps the use of this term idiomatically not much different from the linguistic meaning.

And objectivity (or transparency) is one of the most important principles of corporate governance, as it is the first weapon to fight corruption and embezzlement and manipulation and fraud. The absence of objectivity (transparency) opens the floodgates to hold corrupt deals and suspicious transactions but with objectivity it is difficult to abuse power in favor of certain working class illegally and secretly.

According to some researchers (Hour, 2013) that the objective (or transparency) of management of any of the companies can bring many advantages, including, but not limited to:

1. Improve the image of the management and the company's image both locally and internationally in the field of reform and reducing corruption.
2. Spread the good values in the company and calling for reform and the fight against corruption.
3. Develop a culture of employees of the company in the field of reform and publish the principles and values calling for the creation of an environment free from all forms of corruption and abuse of power.
4. Seek to activate all laws and regulations that are supportive of objectivity and independence in the company.
5. Identify the regulatory and legislative bases in the company in the field of reform and the fight against corruption.
6. Detection of corruption in the company, diagnosis, study and research on the causes and suggest ways of remedying it and reduce the spread.

Management objectivity and the need for non-interference in the work of the auditor were not included in the modern concepts, (Mautz and Sharaf) (1961) noted that The auditor should be completely independent in all stages of the audit process, in the sense to be neutral and honest in his work and objective and impartial during the implementation of the audit process, and to ensure that it should enjoy full independence in the preparation of the audit program without the intervention of the management (the client 's management) of any amendment to this program, and to enjoy full independence in the field of inspection without exposure to any

pressure or interference by the management (the client 's management) in the process of selecting the areas and activities and elements that are subject to the screening process.

Previous studies and the distinguishes between the current study and the previous studies:

And through a research the researchers have performed for the previous literatures, they have found a scarceness of studies that have linked the objective of management and planning for the audit process and the collection of evidence, but the researchers will present more studies closer to the subject of this study, and these studies:

- Study (Alshttarat, 2016) entitled: impact of electronic commerce on audit planning and documentation mechanism in Jordanian audit firms: field study, the study aimed to identify the impact of electronic commerce on the planning mechanism for the audit process and documentation in the Jordanian audit firms, and procedures performed by the external auditor for organizing, planning and documentation of the audit process. To achieve the objectives of the study, the researcher designed a questionnaire and distributed a sample on Jordanians auditors practicing for the auditing profession in 2014. The researcher found a number of results, including: the auditor's review of the work Plan for the audit process in the case of the client that is subject of the audit is practicing electronic business activities, and his eagerness to collect the largest evidence to ensure the integrity of the financial position of the client subject of audit, in addition to having the impact of e - commerce operations on documenting audit procedures performed by the auditor mechanism.
- Study (Kerdouri, 2015) entitled: the role of the analytical review in improving the performance of the audit process in light of the use of information technology: the case of a composite refining salt for a term of Biskra study, the study aimed to identify the role of analytical review based on traditional quantitative and advanced to improve auditor performance in styles circumstances where the need to make use of information technology in the Algerian economic enterprise emerged. The study served to highlight the contribution of artificial neural networks to improve the analytical review. To achieve the objectives of the research a field study was conducted on salt Biskra state compound for the period (2010-2013) using a variety of analytical review methods of modeling as a model financial ratios for the discovery of fundamental errors, and a typical regression and time series as methods compared to the model of artificial neural networks in sales forecasting. The study concluded that analytical review methods contribute to the task of giving warnings about the existence of manipulation in the financial statements and the discovery of fundamental errors, and there are significant differences on the artificial neural networks method is superior to conventional statistical methods in predictive ability and accuracy of classification.
- Study (Mohamad, 2013) entitled: Auditors' responsibility and their role in the assessment of management fraud risk in the light of international auditing standards: analytical study, the study aimed to indicate the role and responsibility of auditors in Syria to assess the management fraud risk in the light of international auditing standards, and to achieve the goal of this study a Researcher conducted analytical study of the working papers of the company KPMG For some of its client to find out the management fraud risk assessment and their compatibility with international auditing standards, in order to disseminate the results to the Syrian audit environment procedures , the researcher designed questionnaire was distributed to a sample of auditors accredited to the Syrian Securities Commission of accounts and analysis of the results using a combination of statistical methods. The researcher found a set of conclusions , including: that the auditors in Syria are playing an important role in

assessing the risks of management fraud at all stages of the audit process, auditors in Syria are responsible for assessing management fraud risk at all stages of the audit process, risk assessment is considered one of the most important stages of the audit process regarding the evaluation of management fraud risk, and the analytical procedures are considered one of the most effective ways to evaluate the management fraud risk assessment. In light of the findings, the researcher presented a set of recommendations, including: the need to focus on the procedures that are not expected by the client management and that the management has not assigned the auditors to perform them, and the need to pay more attention to analytical procedures and to identify and assess management fraud risk.

- Study (Robert and Dosch, 2013) entitled: Exploring the Principles for increasing Integrity and Objectivity in External Audits, the study aimed to show the principles that will increase the objectivity and integrity of the external audit in the United States, where the study was carried out on (56) auditors. The results of the study showed that people who are qualified to manage data and records have an important role in the audit process, because the objectivity and integrity of the information is very important to achieve the quality of the audit process outputs.
- Study (Anbar and Mohammad, 2012) entitled: effects of management decisions in the responsibility of the auditor: Applied Research in a sample consists of companies under control audit court office and the private sector of auditing, the study aimed to show the importance of management representations, which represent a proof of evidence that auditors observe and seek hard to get them to come to conclusions based on the basis of the professional opinion about the fairness and integrity of the financial statements that represent the issues and figures management claim as fair, so researchers sought to highlight the importance of management representations and used as evidence in the Iraqi environment, as well as to show the impact of using management decisions and disclosures in the credibility of the financial reporting and enhance confidence in the reports. They found several results (theoretical and practical), most notably that the auditor is directly responsible for everything that they contain in the management representations of data, as well as it is responsible for the lack of restriction of opinion or apologizing for it is being made in the event of failure to obtain such a declaration. In light of the already reached results, the researchers made a number of recommendations, most notably the need for the Accounting and Auditing Standards Board of the Republic of Iraq to intensify its efforts to issue the audit guide (Iraqi) based on its content to the ISA "average" number (580) and in line with the environment local regulators.
- Study (AL-Azemi, 2012) entitled: the impact of external auditor to improve the credibility of accounting information in the Kuwaiti Zakat House, the study aimed to identify the impact of the external auditor to improve the credibility of accounting information in the Kuwaiti Zakat House. The researcher found the presence of the impact of the external auditor (through capability of professional auditors, independence and objectivity, impartiality and transparency and abiding the rules of professional conduct) to improve the credibility of accounting information from the viewpoint of financial managers and heads of accounting departments and internal auditors working in the Kuwaiti Zakat House. The researcher at the end of his studies a number of recommendations, including paying the external auditor's professional competence necessary importance they affect in improving the credibility of accounting information, to emphasize the independence of the external auditor and objectivity is clear and its impact in improving the credibility of accounting information, work to make sure the integrity of the external auditor and transparency and taking into account the adherence and commitment to the rules of professional conduct.

- Study (Radwan, 2012) entitled: the impact of the internal audit on risk management in the light of international auditing standards, the study aimed to identify the impact of internal audit at Banking Management risks at Commercial Banks In Gaza According International Audit Standards. To achieve Objectives of the study a questionnaire was Design Composed Of a four sections, distributed On Internal Auditors at Banks Commercial in Gaza. one the most important Results of the study that there was a Positive indication between Applying Standards Features (independence, objectivity and professional capability) and performance criteria of (management audits, planning and resources management, institutional control and information identification) by Internal Audit staffs at Commercial Banks In the Gaza Strip and between Banking Risk Management and the extent of Awareness of the application mechanisms. Among the most important recommendations made by the researcher is that authorized management should pay attention at Commercial banks in the Gaza Strip regarding actively Internal audit and that will help The development of internal audit and provide Potential Necessary To strengthen Its place Inside the bank, the need to focus private legislations in Internal audit profession on independence of such sections and qualifications of employees.
- Study (Kizirian, et. al. , 2005) entitled: The impact Of Management Integrity on Audit Planning and Evidence, the study aimed to identify the impact of the management integrity on the audit planning process and collection of evidence, relied on worksheets data for 60 clients of the big four clients (Big Four) in the United States of America. This study examined the impact of the auditor assessment of the integrity of the management's evaluation of the auditor 's judgment on material misstatement and planning the audit process and the results of the audit, the study assumed that the integrity of the management associated with the preliminary risk assessment and persuasion, timing and extent of planned procedures in the audit, the study also assumed that the integrity of the management assessment is affect the credibility of the evidence that is obtained from the management away from the influence of risk assessment and, finally , the study is expected that the integrity of management assessment is linked to the discovery of material misstatement. the study pointed out that when you add integrity of management to the digital equivalent of Mok and Wright used the years (1993 and 1999), the mathematical equation will support the theory of researchers, but turned out that all theories will fade but two theories when the researchers added a variable indicators for the errors of previous years, the study continued to search for the impact of the integrity of the management over the persuasiveness of audit evidence that was far from the influence of risk assessment, it is worth mentioning that after the control in previous years errors It has been found an inverse relationship between the auditor's assessment of the integrity of the management and the potential for error detection.
- Study (Beaulieu, 2001) entitled: The Effects of Judgments of New Clients' Integrity Upon Risk Judgments, audit evidence, and fees, the study aimed to identify the impact of the auditor's judgment on the objectivity and impartiality of new clients on the risks of his decisions, professional judgment, evidence and audit fees. The researcher found through the application of his study on 63 auditors (partners in auditing firms) the importance of objectivity and creditability of the client when planning for important new audit engagement because they affect the audit risk and considered a confidence source, and that the auditor may increase the scope of his or her work and its fees if the judgment on the integrity of the client is less than it should be. The researcher also confirmed the existence of an inverse relationship between the judgment on the

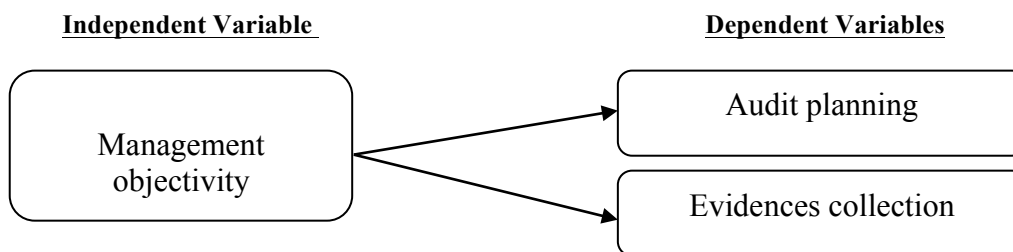
objectivity and impartiality of new clients and the size of the audit evidence and audit fees.

And perhaps what distinguishes the current study from the previous studies, is the focus on the impact of the management objectivity on the two main dimensions of the audit process (planning the audit and collection of audit evidences) to complete the audit process requirements efficiently and accurately. Also, what it distinguishes the current study from previous studies that it was made on the population of Jordanians auditors as never before such a study conducted (within limits of researchers knowledge) to this population, including nature of the environmental characteristics differ (in some respects) than environments in previous studies and in addition to a high competition of this sector on the local and regional level.

THE STUDY MODEL AND ITS VARIABLES

The researchers designed study model which shows the relationship between the variables as follows:

Figure (1): Model of study



RESEARCH HYPOTHESIS

To achieve the objectives of this study and to answer its questions, and based on the findings of previous studies, the hypotheses of the study are formulated as follows:

- ✓ H01: Management objectivity in Jordanian shareholding companies does not affect on the planning of the audit process from the viewpoint of Jordanian auditors.
- ✓ H02: Management objectivity in the Jordanian shareholding companies does not affect on the collection of audit evidences from the perspective of Jordanian auditors.
- ✓ H03: No statistically significant differences (at the 0.05 significance level) to impact of management objectivity in Jordanian shareholding companies on audit planning from the viewpoint of Jordanian auditors attributed to the experience of Jordanian auditors.
- ✓ H04: No statistically significant differences (at the 0.05 significance level) to impact of management objectivity in Jordanian shareholding companies on evidences collection from the perspective of Jordanian auditors attributed to the experience of Jordanian auditors.

THE STUDY POPULATION

The study population consisted of auditors practicing the auditing profession in Jordan which are (327) certified auditors until the beginning of year 2016 (According to Statistics of Jordan Association of Certified Public Accountants (JACPA) in 1/1/2016).

It has been selected sample deliberate of auditors working in the branches and offices of major international audit firms (Big Four), And a random sample of auditors working in auditing offices in the Capital city (Amman) and study sample size (115) auditors , representing 35% of the study population.

A questionnaires were distributed and collected by hand, as the number of distributed questionnaires was (115) questionnaire only (108) recovered and (5) were excluded for the

incompleteness, and the number of questionnaires approved for the purposes of analysis and research was (103) questionnaire, representing approximately (90%) of the questionnaires were distributed.

DATA COLLECTION METHODS

After referring to many of the researches and studies published in the journals and scientific periodicals relevant to the subject of research and also the researchers have designed a specific questionnaire to this study based on the theoretical framework and previous studies have been distributed on the population of the study and was received by hand.

The questionnaire sections and the questions related to measure each variable of the study variables can be summarized in the following table (Table (1)):

Table (1): Sections of the Questionnaire and questions that measure the study variables

Sections of Questionnaire	Variable	Questions that measure the variable
section (I)	Age	1
	Educational level	2
	Scientific specialization	3
	Job title	4
	Years of experience in field of audit	5
	Number of training courses attended by the respondents in field of audit	6
	Professional Certificates obtained	7
Section (II)	Impact of management objectivity in Jordanian shareholding companies on audit planning from the viewpoint of Jordanian auditors	(8 - 21)
Section (III)	Impact of management objectivity in Jordanian shareholding companies on evidences collection from the perspective of Jordanian auditors	(22 - 34)

It is worth mentioning that second and third sections from the questionnaire sections were formed in a way that would in measurement also, Likert scale five Grades used (very much agree, much agree, average agree, little agree, very little agree) and were given grades (5, 4, 3, 2, 1) respectively.

To test the reliability of the results of the questionnaire and the link between the questions it presented to a group of colleagues and universities professors in the accounting and management quality departments and some specialists in the field of internal audit and quality control departments in Jordanian universities in order to arbitration and give their opinions about the goodness of formulation and interdependence of its clauses, in addition to the use of credibility analysis (reliability) Reliability analysis to calculate Alpha Cronbach Coefficient and the value was equivalent to 88.1 % almost, and where it is more than acceptable ratio (60%) (Sekaran and Bougie, 2015), It means the possibility of adopting the results of the questionnaire and confidence to its credibility in achieving the objectives of the study.

DATA ANALYSIS METHODS

To achieve the objectives of this study and to test it hypotheses, all of the data that obtained have been processed using the Statistical Package for Social Sciences (SPSS), And numerous

tests conducted related to the census descriptive by finding some ratios and frequencies, means, standard deviations, to identify the respondents characteristics of individuals on the questionnaire questions, and the objectivity of the management influence in Jordanian shareholding companies to plan the audit process and to gather the necessary audit evidences.

Also (T-test) was used as a test For one sample to test both hypothesis first and second study by comparing the average for both, since the realized degree of availability for the characteristic when is the calculated average is higher than the assumed average (the value of cut point) provided that the value of (t) statistically significant at the confidence level of the user (Sekaran and Bougie, 2015).

Also (one way ANOVA) was used to test the hypothesis of the third and fourth study, related to test the lack of a statistically significant difference (at the 0.05 significant level) to the impact of management objectivity in Jordanian shareholding companies to plan the audit process and the collection of audit evidence from the perspective of Jordanian auditors attributed to the experience of Jordanian auditors.

THE CHARACTERISTICS OF THE RESPONDENTS TO THE QUESTIONNAIRE:

From analyzing the answers to the first section of the questionnaire analysis (Table 2) that Individuals respondents on questions of the questionnaire are appropriate academic qualified, and all of them at least Bachelor Degree. Also what reinforces confidence in the results that have been obtained that approximately 87% of respondents with experience of not less than 5 years working in the field of auditing? It is also noticeable that there is diversity in the Job Title (Director General of the Office of audit, Senior Auditor, auditor, auditor assistant) and many levels existed and that shows the developments in the planning process and collecting evidence and the impact on management objectivity in Jordanian public shareholding companies.

Its notable that the diversity of the respondents majors between the accounting and business administration, finance and banking and due to the differences in positions and job titles, although the largest percentage are a specialty accounting (90.3%) of the respondents.

It's also notable that the percentages of (66%) of the respondents are not under the age of 35 years, and this is in line with long years of experience in the field of auditing. And also what reinforcing confidence in the results that have been obtained that (70%) of the respondents hold professional certification promote and affirm their knowledge of the profession in the field of auditing and confirming that (91.3%) of the respondents who participated in the training courses more than two courses in field of auditing.

From all of the above it's clear that necessary knowledge of the respondents was available for the importance of management objectivity in Jordanian shareholding companies and their impact on planning and gathering audit evidence and their ability to understand the questionnaire questions and answer them.

Table (2)

Demographic Characteristics of Respondents on Questionnaire

No.	Variable	Alternatives of Answers	Frequenciec	Percentage
1.	Age	Less than 25 years	14	13.6%
		25 to less than 35 years	21	20.4%
		35 to less than 45 years	45	43.7%
		45 years and above	23	22.3%
		Total	103	100%
2.	Education Level	Bachelor	76	73.8%
		Master	21	20.4%
		Doctorate	6	5.8%
		Total	103	100%
3.	Scientific Specialization	Accounting	93	90.3%
		Business Administration	4	3.9%
		Finance and Banking	6	5.8%
		Total	103	100%
4.	Job Title	Director General of the Office of audit	20	19.4%
		Senior Auditor	31	30.1%
		Auditor	39	37.9%
		Auditor Assistant	13	12.6%
		Total	103	100%
5.	Years of Experience in field of audit	Less than 5 years	13	12.6%
		5 to less than 10 years	25	24.3%
		10 to less than 15 years	43	41.7%
		15 years and above	22	21.4%
		Total	103	100%
6.	Number of training courses attended by the respondents in field of audit	Two or less	9	8.7%
		3 - 5	28	27.2%
		6 - 8	34	33%
		9 and more	32	31.1%
		Total	103	100%
7.	Professional Certificates	CPA	15	14.6%
		JCPA	39	37.9%
		CMA	10	9.7%
		CIA	8	7.8%
		Total	72	70%

Research hypothesis testing

For testing hypotheses of the study, the researchers extracted means and standard deviations for the answers of individuals, and that for each paragraph of the resolution in accordance with the field which paragraph belongs, also individuals answers have been divided according to the average calculation into the following categories in line with the Likert scale quintet which was built upon a questionnaire study based on the following equation:

$$\text{Range category} = (\text{Maximum} - \text{minimum}) / \text{Number of Categories} = (5 - 1) / 3 = 1.33$$

Where:

The level of importance is High: If the mean (3.67 or above).

The level of importance is Average: If the mean (3.66 - 2.34).

The level of importance is Low: If the mean (2.33 or less).

The following is an explanation of the results for each hypothesis of the study hypothesis.

Testing of the first hypothesis:

H01: Management objectivity in Jordanian shareholding companies does not affect on the planning of the audit process from the viewpoint of Jordanian auditors.

Table (3) shows means, standard deviations, and the level of importance and rank of the paragraphs relating to the impact of management objectivity in Jordanian shareholding companies on audit planning from the viewpoint of Jordanian auditors.

Table (3): Means, standard deviations, and the level of importance and rank of Paragraphs relating to the management objectivity influence in Jordanian shareholding companies to audit planning

Paragraph	Mean	standard deviation	Significance level	Rank	
Depending on your experience in the field of audit your confidence in the subject of management objectivity in Jordanian shareholding companies affect your planning to the audit process through:					
8.	Take the decision to accept the task of checking or re-admitted.	4.01	0.98	High	3
9.	Broaden understanding of the auditor of the nature of the client's business.	4.10	0.80	High	1
10.	Determine the extent of the efficiency of audit firm to implement the required professional services appropriately.	3.80	0.95	High	7
11.	Identify the need for the use of an external expert to contribute to the implementation of the required professional services effectively.	3.30	0.97	Average	14
12.	Identify the resources needed by the Audit Office to be able to complete the work on time.	3.75	0.95	High	9
13.	Clarification of corporate accounting policies followed.	3.96	0.91	High	4
14.	Determine whether the audit function should be subject to additional preventive measures.	3.60	1.01	Average	12
15.	Determine whether there was a conflict of interest in the case to accept the task of checking or re-admitted.	3.67	0.99	High	11
16.	Test for the presence or absence of risk to the independence of the auditor.	3.95	0.97	High	5
17.	Study the possibility of discovering the inherent risks the client.	3.79	1.02	High	8
18.	Study the possibility of the discovery of regulatory risk at the client.	3.57	1.05	Average	13
19.	Clarify control procedures used in the company the subject of audit.	3.73	1.01	High	10
20.	Identify strengths and weaknesses in the internal control system in the company subject of scrutiny.	4.02	0.88	High	2
21.	Increased regulatory auditor procedures during the audit process.	3.83	0.97	High	6
Mean of all paragraphs relating to measure the impact of management objectivity in Jordanian shareholding companies on audit planning		3.79	0.64	High	

Based on the findings contained in the above table shows the following:

- Indicates the mean height of the paragraph with a rank (1) of (4.10) and paragraph rank (2) of (4.02) on the great impact of management objectivity to broaden understanding of the auditor of the nature of client activity, in addition to the keenness of the auditor to identify strengths and weaknesses in the internal control system in the company subject to audit and shows the standard deviation of paragraphs (0.80) and (0.88) on

the existence of an agreement and harmony among respondents about these two paragraphs individuals.

- Mean refers to paragraph of rank (14) which is (3.30) shows a lack of an external expert to contribute to the implementation of the required professional services effectively, and perhaps the reason that the independence of the auditor and maintaining the confidentiality of company data into the audit may not allow using such these experts.

In general, the mean of total paragraphs relating to measure the impact of management objectivity in Jordanian shareholding companies on audit planning from the viewpoint of Jordanian auditors has reached (3.79), indicating a high degree of influence. This is because (from the perspective of the researchers) to the effect of the management on the conduct of the audit and the planning process in the event of lack of access to objective and try to influence the work of the auditor and the providing data needed to carry out its mission in an optimal way. And it shows the standard deviation of (0.64) on the existence of an agreement and harmony among respondents about paragraphs of this dimension in general.

To test this hypothesis (T-test) was used for one sample using the reference value represents the average score Likert scale and the (3), are shown in Table No. (4) The results of testing this hypothesis.

Table (4): The result of test the first hypothesis using t-test for one sample

The dimension	Mean	Standard Deviation	Value (t) Calculated	Value (t) Tabulated	Degrees of freedom	The level of significance	The result of testing the hypothesis
Impact of management objectivity on audit planning	3.79	0.64	20.42	1.98	102	0.000	Reject

Based on the findings contained in the above table shows that the value of t Calculated (20.42) higher than Tabulated value, and significance level (α) less than (0.05), which means rejecting the null hypothesis and acceptance of alternative hypothesis that management objectivity in Jordanian shareholding companies has impact on audit planning from the viewpoint of Jordanian auditors.

TESTING OF THE SECOND HYPOTHESIS:

H02: Management objectivity in Jordanian shareholding companies does not affect on the collection of audit evidences from the perspective of Jordanian auditors.

Table (5) shows means, standard deviations, and the level of importance and rank of the paragraphs relating to the impact of management objectivity in Jordanian shareholding companies on evidences collection from the perspective of Jordanian auditors.

Table (5): Means, standard deviations, and the level of importance and rank Paragraphs relating to the management objectivity influence in Jordanian shareholding companies to gather audit evidences

Paragraph		Mean	Standard Deviation	Significance level	Rank
Depending on your experience in field of audit, your confidence in the subject of management objectivity in Jordanian shareholding companies affect audit evidences collection through:					
22.	Make sure not to hide any of the necessary audit evidence.	4.19	0.84	High	1
23.	Increase the size of the necessary audit evidence.	3.95	0.84	High	7
24.	Reassurance to the adequacy of the audit evidence to implement the required task.	4.00	0.85	High	5
25.	Ensure the appropriateness of the audit evidence is collected.	4.05	0.89	High	4
26.	Obtain audit evidence about a certain quality.	3.96	0.81	High	6
27.	Obtain audit evidence at the time to the work of the auditor.	3.93	0.74	High	8
28.	Obtain audit evidence convincing reliable and reassuring them.	3.92	0.87	High	9
29.	Obtain audit evidence of high credibility.	4.12	0.85	High	2
30.	Expand the scope of the audit evidence is collected.	3.86	0.88	High	11
31.	Ensuring that confirmations and evidence collected match data obtained	4.07	0.88	High	3
32.	The study of the sequence of the implementation and adoption of evidence is collected.	3.76	0.98	High	12
33.	Clarify control procedures used in the company on the audit evidences.	3.87	0.92	High	10
34.	Increased regulatory auditor procedures on necessary audit evidences.	3.75	0.96	High	13
Mean of all paragraphs relating to measure the impact of management objectivity in Jordanian shareholding companies on evidences collection		3.96	0.59	High	

Based on the findings contained in the above table shows the following:

- The high mean of paragraph rank (1) of (4.19) and paragraph rank (2) of (4.12) Indicate the significant impact of the management objectivity to increase the keenness of the auditor to make sure not to hide any of the necessary audit evidence, in addition to the keenness of the auditor to obtain audit evidence of high credibility, and the standard deviation of paragraphs shows (0.84) and (0.85) on the existence of an agreement and harmony among respondents about those paragraphs.
- Mean refers to paragraph of rank (13) which is (3.75) shows the failure of the auditor increase regulatory actions on the audit evidence, and perhaps the reason that the regulatory sufficient measures undertaken by auditor and does not need to any increase whatever the management objectivity degree in the company audited.

In general, the mean of all paragraphs relating to measure the impact of the management objectivity in Jordanian shareholding companies to evidences collection from the perspective of Jordanians auditors has reached (3.96), indicating a high degree of influence. This is because (from the perspective of the researchers) to the professional skepticism which is generated the lack of management objectivity affect the collection of audit evidence and the careful selection of a certain quality evidence and concern for the appropriateness and adequacy and the extent of persuading it to reach the appropriate governance and carry out its mission in an optimal way. And the standard deviation of (0.59) shows the existence of an agreement and harmony among respondents about paragraphs of this dimension in general.

To test this hypothesis (T-test) was used for one sample using the reference value represents the average score Likert scale (3), Table No. (6) Shows the results of testing this hypothesis.

Table (6): The result of the second hypothesis using t-test for one sample

The dimension	Mean	Standard Deviation	Value(t) Calculated	Value(t) Tabulated	Degrees of freedom	The level of significance	The result of testing the hypothesis
Impact of management objectivity on evidences collection	3.96	0.59	24.66	1.98	102	0.000	Reject

Based on the findings contained in the above table shows that the value of t calculated (24.66) is higher than tabulated value, and significance level (α) less than (0.05), which means rejecting the null hypothesis and acceptance of alternative hypothesis, which means that management objectivity in Jordanian shareholding companies has impact on evidences collection from the perspective of Jordanian auditors.

TESTING OF THE THIRD HYPOTHESIS

H03: No statistically significant differences (at the 0.05 significance level) to impact of management objectivity in Jordanian shareholding companies on audit planning from the viewpoint of Jordanians auditors attributed to the experience of the Jordanian auditors.

For the purpose of testing the third hypothesis, (one-way ANOVA), was used and Table (7) shows the third hypothesis test results.

Table (7): The result of testing the third hypothesis using "One way ANOVA"

	Sum of squares	Degree of freedom	Average squares	Value F Calculated	The level of significance
Between groups	0.629	3	0.210	.502	.982
In groups	41.343	99	0.418		
Total	41.972	102			

Based on the findings contained in the above table shows that the value of F calculated (.502) is not statistically significant at (0.05), indicating a lack of significant statistically differences for impact of management objectivity in Jordanian shareholding companies on audit planning from the viewpoint of Jordanian auditors attributed to the experience of Jordanian auditors.

The researchers explain this result that the planning for the audit process is going according to specific steps and agreed upon between the Jordanian auditors regardless of their years of experience, as the auditor is not able to practice the audit profession only after having scientific knowledge and adequate training to carry out the task of auditing.

TESTING OF THE FOURTH HYPOTHESIS

H04: No statistically significant differences (at the 0.05 significance level) to impact of management objectivity in Jordanian shareholding companies on evidences collection from the perspective of Jordanians auditors attributed to the experience of Jordanian auditors. For the purposes of testing the hypothesis, (one-way ANOVA) was used and Table (8) shows the hypothesis fourth results.

Table (8): The result of testing the fourth hypothesis using "One way ANOVA"

	Sum of squares	Degree of freedom	Average squares	Value F Calculated	The level of significance
Between groups	0.481	3	0.160	.439	.726
In groups	36.154	99	0.356		
Total	36.635	102			

Based on the findings contained in the above table shows that the value of F Calculated (.439) is not statistically significant at (0.05), indicating a lack of statistically significant differences to the impact of management objectivity in Jordanian shareholding companies on evidences collection from the perspective of Jordanians auditors attributed to the experience of Jordanian auditors.

And researchers explain this result that the collection of audit evidences is an essential task of the auditor keen to do and is going according to defined and agreed steps between auditors regardless of their years of practical experience, as the auditor cannot complete the audit process in the absence of evidence and clues and approvals to express their professional opinion Confidence and contentment.

RESULTS

In light of the data analysis and hypothesis testing, the results as follows:

1. Auditors always make sure to review and evaluate management objectivity in Jordanian shareholding companies before starting the audit process
2. The management objectivity affects on the audit planning in Jordanian shareholding companies from the perspective of Jordanians auditors.
3. The management objectivity affects on evidences collection in Jordanian shareholding companies from the perspective of Jordanians auditors.
4. No significant statistically differences were found for the impact of management objectivity in Jordanian shareholding companies on audit planning from the viewpoint of Jordanians auditors attributed to the experience of Jordanian auditors.
5. No significant statistically differences were found for the impact of management objectivity in Jordanian shareholding companies on evidences collection from the viewpoint of Jordanians auditors attributed to the experience of Jordanian auditors.

RECOMMENDATIONS AND SUGGESTIONS

In light of the results that have been reached, the researchers can recommend the following:

1. The auditors should focus on and assess the management objectivity in Jordanian shareholding companies before starting their mission of verifiability, and take it into account when planning the audit process and gather audit evidences.
2. Give the use of external experts more attention to contribute to the implementation of the required professional services effectively, especially in the case of doubt or signs of lack of management objectivity in the audited company.
3. Auditors should increase regulatory control actions on audit evidence and study the sequence of implementation and the adoption of evidence that is collected when there is doubt or signs of lack of management objectivity in the audited company.
4. Further studies on the impact of the management objectivity in Jordanian shareholding companies at different stages of the audit process.

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Analysis on the Influence of Inflation, Ship's Call, And Unloading Cost towards General Cargo Inter-Insular Ships in Surabaya Port

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Abstract

Indonesia is an archipelago nation since statistic shows that Indonesia consists of more than 13,000 islands, it is natural for inter-insular ships to play a dominant role in connecting one island to another supported by other local ships. In comparison, the inter-insular ships docking and unloading in Surabaya's port, as well as the Ship's call and DWT Ship's call, outweighs the local ships. In 2002-2006, inter-insular ships' unloaded 8,791 units of 28,739,718 tons; 7,820 units of 31,021,731 tons; 8,277 units of 25,496,489 tons; 9,595 units of 22,793,415 tons; and 9,345 units of 23,250,003 tons. On the other hand, in the same period of time, local ships only unloaded 1,204 units of 158,877 tons; 901 units of 157,663 tons; 1,023 units of 126,111 tons, 1,124 units of 403,826 tons; 919 units of 176,550 tons. This research wants to analyze the number of inter-insular ships, based on several internal and external variables: Unit Ship's Call (X1), DWT Ship's Call (X2), Inflation (X3), and Unloading Cost (X4). The research was done in Surabaya, Indonesian port during 2014-2015.

Keywords: Influence of inflation, ships call, unloading cost

INTRODUCTION

In reality, the inter-island or inter-insular sea trades are served by inter-insular ships, such as Liner ships, Trumper ships, and Special cruise ships. These ships, either bearing national's or international's flags, became the connector from one island to another to facilitate the flow of passengers and goods as well as ensure the sufficient supply of goods in certain territory or island (Sasono, 2014). Insufficient supply of goods would disrupt the balance between the flow of goods and flow of money, resulting in price increase should the flow of goods is lower than the flow of money. Hence, the inflation rate at that particular area would be increased (Prof. Dr. Herman Budi Sasono).

Since statistic shows that Indonesia consists of more than 13,000 islands, it is natural for inter-insular ships to play a dominant role in connecting one island to another supported by other local ships. In comparison, the inter-insular ships docking and unloading in Surabaya's port, as well as the Ship's call and DWT Ship's call, outweighs the local ships. In 2002-2006, inter-insular ships' unloaded 8,791 units of 28,739,718 tons; 7,820 units of 31,021,731 tons; 8,277 units of 25,496,489 tons; 9,595 units of 22,793,415 tons; and 9,345 units of 23,250,003 tons. On the other hand, in the same period of time, local ships only unloaded 1,204 units of 158,877 tons; 901 units of 157,663 tons; 1,023 units of 126,111 tons, 1,124 units of 403,826 tons; 919 units of 176,550 tons (Sasono, 2014). The number of inter-insular ships is fluctuating (Merkuryev et al., 1998), based on several internal and external variables: Unit Ship's Call (X1), DWT Ship's Call (X2), Inflation (X3), and Unloading Cost (X4).

Problem Statement

According to the background, the problems can be formulated as follows:

1. Is Unit Ship's Call influential to a load of General Cargo inter-insular ships docking at the harbor of Tanjung Perak Surabaya?
2. Is DWT Ship's Call influential to a load of General Cargo inter-insular ships docking at the harbor of Tanjung Perak Surabaya?
3. Is inflation influential to a load of General Cargo inter-insular ships docking at the harbor of Tanjung Perak Surabaya?
4. Is unloading fee influential to a load of General Cargo inter-insular ships docking at the harbor of Tanjung Perak Surabaya?
5. Are Unit Ship's Call, DWT Ship's Call, inflation, and unloading fees simultaneously influential to a load of General Cargo inter-insular ships docking at the harbor of Tanjung Perak Surabaya?

THEORETICAL REVIEW

Trading Theory

The grand theory of trading is the Theory of Exchanging (Young-Ybarra & Wiersema, 1999) stated that "Exchanging or trading emerges due to the fact that one or more parties see additional benefits coming from such activity. The additional benefits serve as the motives for people to do trading. The benefits are called the gains from trade. In short, the motive of conducting trading is the possibility of getting gains from trade.

According to Shore, et al. (Shore, Tetrick, Lynch, & Barksdale, 2006): "The classical theory of international trade was eminently successful in one area: it established convincingly the gains from international specialization and trade. These are attributed to the existence of a comparative advantage, which provides the opportunity for a country to import those goods for which its autarky costs are relatively high in exchange for exports of goods it can produce relatively cheaply in autarky. The country thus economizes in the use of its resources, obtaining for a given amount thereof a larger total income than if it attempted to produce everything itself."

Inter-island trading is merely a term for the trading activity between inhabitants of a territory with the inhabitants of another territory (McArthur & Osland, 2013). Thus, the reasons for trading and how it is conducted become essential in explaining the emergence of inter-island or inter-insular trading.

Ship's Call Unit and DWT ship's Call Inter-insular Ship

Ship's arrival or Ship's call is the number of ships entering and docking to a port for the purpose of unloading passengers or goods in a certain period, such as Ship's Call per day, Ship's Call per month, or Ship's Call per year. Each Ship's arrival or Ship's call would be counted in units. Since the number of ships entering would be the same with the number of ships exiting, the data in Harbor Master or Port Administration would be only on the Ship's call. The only exception to this is when unexpected things occurred, such as a burned-down or sinking ship, which usually happened due to technical errors of the stevedore in arranging the ship's docking positions. The docking ships consist of:

1. Sea Liner: a ship which sails between countries carrying the export-import commodities or enter country's commodities.
2. Inter-insular Ship: a ship which sails between islands in the region of a certain country, such as the domestic sailing route of Surabaya-Maumere or Surabaya-Samarinda.

3. Special Ship: a ship which is dedicated to solely transport industrial raw materials for its company owner, such as the ship of PT Bogasari which is dedicated to transport grains of wheat, the ship of PT Indocement which is dedicated to transport dry bulk concrete, or the ship of PT Pertamina with a sole purpose of transporting Pertamina fuels – raw and LPG.
4. Local Ship: an inter-island ship, such as fishing or trading ship, which is usually made of wood. It is usually 30-60 meters long and about 5 meters wide with about 6-10 crews.

According to Jansson et al. (Jansson & Shneerson, 1978): “Dead Weight Tonnage is a carrying capacity that proven in long-ton units (2240 lbs. = 1016 kg). Deadweight tonnage = loaded displacement tonnage. Loaded displacement, is the ship’s weight itself (light ship) added with the cargo (goods or passengers), fuel, water, stores, dunnage, etc. Ship’s weight with all of the cargo will press the ship into the water until it reaches the maximum draft allowed.

Dead Weight tonnage (DWT), according to cargo safety construction certificate that published by international convention for the safety of life at sea (Smith, 1974), What is meant by Deadweight of ship (metric ton) or ton metric is weight of ship’s body itself (light ship), plus all of the cargo whether goods or passengers, plus solar fuel, diesel oil, and other oil that carried in, plus waters for drink and bath for all of the ship’s crews and passengers, logistic material such as rice, meat, vegetable, etc. that usually used to cook and eat. Dunnage and the others called as loaded displacement, so the ship with all of the cargo will press the ship’s body until reaching the allowed maximum point. If the ship with all of the cargos suppress the ship more that the allowed point or above the insurance line then if some accident occurred on the sea (the ship is sink), due to overload, then it will be hard to get reimbursement to marine cargo insurance (Lane, 1964).

Inflation

According to Jansson (Jansson & Shneerson, 1978) (1998:43): inflation is “to increase the general price in some situation or some situation where the value of money is decreased. In line with that notion, there are some authors who mentioned inflation as a process or event of the increase of the general price and deflation as the opposite, in which limited as a part of process of event of the decrease of the general price”.

Related to the value of money theory, inflation occurs due to the increase of the amount of money in circulation which is not followed by the increase of goods amount circulation or goods stock. This decreases the value of money. To determine the value of money, it is necessary to observe the velocity factor of money and demand for money. Control or fight against inflation becomes the responsibility of Bank of Indonesia as the central bank as well as several related government’s departments: department of finance, labor, social and industry or commerce.

Bank of Indonesia as a financial institution has a responsibility to keep the stability of the value and the price of the national currency. The value of the national currency, the rupiah, is inversely related to the price of goods and services in general. When the general price of goods and services increases, it means that the value of rupiah decreases. On the other hand, if the general price of goods and services decreases, it means that the value of rupiah increases. The price of the national currency or rupiah is closely related to the price of foreign currencies. To control the inflation, Bank of Indonesia issues several monetary instruments, such as the Open Market Operation, Cash Ratio or Reserve Requirement, Credit/ Loan Policy, Interest Rate Policy, Refinancing, and Foreign Exchange Rate Policy.

Other departments also issue policies related to inflation control, such as Department of Labor with its Wages Policy, Social Department with its Redistribution of National Income, and also the Department of Industrial and Commercial with its Price Policy and Rationing Policy. Therefore, the government often issues policies in a package which is a joint decree by several ministers or related departments.

There are several methods to categorize inflation depends on the purpose. First it is the weigh of the inflation, which is categorized as follows:

- A. Light inflation (under 10% / year)
- B. Medium inflation (between 10% – 30 % / year)
- C. Heavy inflation (between 30% - 100% / year)
- D. Hyperinflation (more than 100% / year)

Next, it is the categorization of inflation based on the initial cause:

- A. Demand inflation: an inflation happened because people's demand for many things are too strong, for example, demand for basic commodities because people feels anxious to stability of national politics and safety
- B. Cash inflation: an inflation happened due to the increase of production costs, such as labor costs, the increase in civil servants' salaries or fuel cost increase.
- C. Domestic inflation: an inflation happened from the country itself, for example, State Budget deficits financed by printing new money.
- D. Imported inflation: an inflation that comes from the outer country.

Unloading Activity

The activity of unloading import goods and inter-insular goods from the ship using crane and ship's sling to the nearest land that usually called port, then from the port, using Lori, forklift or stroller by put it inside and arranged in a nearby warehouse that chosen by dock administrator, while loading activity is the opposite.

The goods that disassembled from inside ship are given by the navigator to the Unloading Officer. All goods that have been unloaded from the ship would be under the inspection and responsibility of Unloading Section on the behalf of the Navigator (McArthur & Osland, 2013). Operation and warehouse functions are explained as: "warehouses or container yard for stock of unloaded goods (ex-import/inter-island) and goods (for the export purpose)"(McArthur & Osland, 2013). When the distance of the warehouse is a bit far from the ship (>_ 130 m), then it can use trucks or stroller to go to the appointed warehouse, but it will have extra cost or overbridge.

Cargodoring long distance is cargodoring job which the distance between ship and warehouse are more than 130m (Jansson & Shneerson, 1978).

When the warehouses in Line 1 are full, then unloading activity can be done by using ship's crane and sling, which will directly unload the goods into the nearby trucks. Loading activity would commence under the opposite procedure.

Direct unloading activity with the truck (truck/ losing/ loading or barge losing/ loading) is unloading activity directly from the ship onto trucks in the hull and continue with carried it out from the net (ex. tackle) also to arrange it in the truck or the opposite (Jansson & Shneerson, 1978).

There are 4 kinds of unloading activity:

- A. Stevedoring activity is a process where the cargo is being taken out from the ship to the cade with using heavy unloading tools and for export cargo which lifted from the cade into the ship
- B. Cargodoring activity is process of carry in the cargo that already on the cade into port's warehouse to stored or stockpiled and, for export goods, it will carry out from the warehouse and take to cade to be ready for loaded into ship
- C. Deliverydoring activity, a shipment cargo from harbor's warehouse to take out from port environment in order to store
- D. Received ring activity, a carriage back process from the factory/ company/ industry to send back into port's warehouse

Cargo unloading activity can be distinguished into 2 conditions:

- A. Foist is a condition where the importer will handle all of the cost from stevedoring, cargodoring and, deliverydoring. Foist condition: for big and heavy cargo will need mechanical tools to load goods from ship's deck
- B. Linear is a condition where the importer only handles some cost like stevedoring and, deiverydoring. Linear condition, for light cargo, won't need mechanical tools, so these goods will get stevedoring cost

General Cargo

The goods that loaded to inter-insular ship in the Tanjung Perak Surabaya port such as, coals, limestone, asphalt, building materials, steel, heavy machinery, aluminum, household appliances, fuel, stuff sacks like cloves, sugar, salt, green beans and other items such as plywood, wood logs, and more, cooking oil, palm oil, lubricating oil and others. Other goods that not connected from above example will consider as general cargo or other which usually taken the form of a cardboard box which contains milk cans, toothpaste, toothbrushes, detergent, pastries, syrup, candy, shirts, pants, gloves, etc.

CONCEPTUAL FRAMEWORK AND RESEARCH HYPOTHESIS

Conceptual Framework

To give an overall picture of the discussed planning in this study, thus can be described with the picture in figure 1:

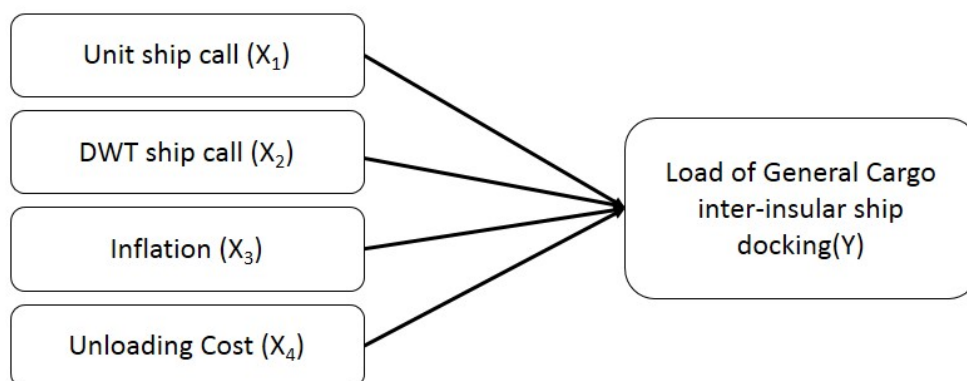


Figure 1. Conceptual Framework

Study Hypotheses

According to the posed problem and existed theory, then it can be taken such as hypotheses:

1. Unit ship's call influenced to inter-insular ship general cargo load which pass Tanjung Perak Surabaya' port

2. DWT ship's call influenced to inter-insular ship general cargo load which pass Tanjung Perak Surabaya' port
3. Inflation influenced to inter-insular ship general cargo load which pass Tanjung Perak Surabaya' port
4. Unload tariff influenced to inter-insular ship general cargo load which pass Tanjung Perak Surabaya' port
5. Unit ship's call, DWT ship's call, Inflation, Unload cost, simultaneously influenced by inter-insular ship general cargo load which pass Tanjung Perak Surabaya' port

RESEARCH METHOD

Research Concept

This research design is made to know (the reason and result) or influence of Unit ship's call, DWT ship's call, Inflation, Unload cost to general cargo load of inter-insular ship on the Tanjung Perak Surabaya' port, thus this research is included in explanatory research which a research to looking for and explain causal relation between variable through hypothesis test (Zan, 1999).

Population and sample

The population is a group that observed in the research or generalization zone that consists of object/subject that has certain quality and characteristic that have set by the researcher to be observed and be concluded. The same thing had also said by Merkurjev (Merkurjev et al., 1998) Population is "... a complete set of observation ...". About sample Merkurjev stated that sample is a sub-group which represent the observed population

Population in this research are DPC APBMI, Port administration, Indonesia's bank branch in Surabaya and, Surabaya city government. The taken data sample is time series data, from January 2002 until December 2006

Research variable

Variable identification

Variable is a symbol or number which include the value (Zaheer & Venkatraman, 1995). Another explanation of variable is object of research or what becomes attention point of a research (Suharsini Arikunto, 1995:96)

Variable from the research which will analyze is consist from independent variable (X) and dependent variable (Y). That variable can be explained, such as:

1. Independent variable, include unit ship's call (X1), DWT ship's call (X2), Inflation (X3) and, Unload tariff (X4).
2. The dependent variable, include volume from inter-insular ship general cargo load (Y).

Definition of operational and variable measurement

Variables in this research, define operationally into:

Unit ship's call (X1)

Unit ship's call is current of the arrival of the ship (ship's call) that enter to port's water, seen from unit ship which includes in scale that uses in variable of unit ship's call (ratio with measurement unit)

DWT ship's call (X2)

Deadweight Tonnage is shipped carrying capacity declared in long-ton (2240 lbs-1016 kg) unit. Deadweight Tonnage = loaded displacement tonnage. Loaded displacement tonnage is the weight of ship itself (light ship), with the cargo (goods and passengers), fuel, water, stores, dunnage, etc. Ship's weight with all of the cargo will press the ship into the water until it reaches the maximum draft that allowed in ton unit measurement.

Inflation (X3)

Increasing the amount of money in circulation while not balanced with an increase of goods circulation or goods stock will make the value of money drop. Scale that uses in inflation variable is ratio with a percent (%) measurement unit.

Unloading tariff (X4)

Charged tariffs in loading or unloading import or export cargo or inter-insular cargo from the ship with using ship's crane and sling to nearest land beside the ship that usually called by port, then moved and organized to nearest warehouse that have chosen by port administrator with using Lori, forklift or stroller, while loading activity is the opposite.

Unloading tariffs are combination of 3 kinds of tariffs: (1) Stevedoring activity is a process where the cargo is being taken out from the ship to the case with using heavy unloading tools and for export cargo which lifted from the cade into the ship. (2) Cargodoring activity is a process of carry in the cargo that already on the cade into port's warehouse to stored or stockpiled and, for export goods, it will carry out from the warehouse and take to cade to be ready for loaded into the ship. (3) Deliverydoring activity, a shipment cargo from harbor's warehouse to take out from the port environment in order to store and Receivedoring activity, a carriage back process from the factory/ company/ industry to send back into port's warehouse.

So, unloading tariffs mathematically can be written such as:

Unloading tariffs (X1.4) = STV + CD + R & D

Scale that uses in unloading variable is ratio with rupiah measurement unit.

Load volume of General Cargo inter-insular ship (Y)

Load volume of General Cargo inter-insular ship is a number of General cargo goods which loaded by inter-insular the ship. The scale which uses in load volume of general cargo inter-insular ship is ration with ton measurement.

Types and Data source

Types of data which use in this research are Qualitative and quantitative data. Quantitative data is an arranged of numbers and sourced from APBMI annual report in 2002- 2006, Port administration Surabaya annual report in 2002-2006, Indonesia's bank branch in Surabaya annual report in 2002-2006, also with the Office of Industry and Commerce Surabaya's annual report in 2002-2006. While qualitative data is data which do not contain of the number or gained information from company prospectus.

Data analyze technique

The analysis in a research with using SPSS program version 11.5. Data processing method (Smith, 1974) that use is a quantitative analysis which is an analysis of the arranged numbers of data, then made into "analysis" with using statistic formula.

- Multiple regression analysis

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + (?) e$$

Where:

Y= Load of general cargo

a= Constanta

b1= Variable regression coefficients of unit ship's call (X1)

b2= Variable regression coefficients of DWT ship's call (X2)

b3= Variable regression coefficients of Inflation (X3)

b4= Variable regression coefficients of unloading tariffs (X4)

X1= Unit ship's call

X2= DWT ship's call

X3= Inflation

X4= unloading cost

e= an error factor causes by another variable outside of the model

- F – Test

This F-test do know if unit ship's call (X1), DWT ship's call (X2), Inflation (X3), unloading tariffs (X4) independent variable, simultaneously have significant influence to dependent variable (Y) of general cargo inter-insular ship's load volume.

- T – Test

T-test is test for independent partial influence significance variable of unit ship's call (X1), DWT ship's call (X2), Inflation (X3), and unloading cost (X4) to dependent variable (Y) of general cargo inter-insular ship's load volume.

RESEARCH RESULT AND DISCUSSION

In order to know unit ship's call (X1), DWT ship's call (X2), Inflation (X3), unloading cost (X4) influence variable to general cargo inter-insular ship's load volume in Tanjung Perak's port in 2002-2006 then it can use multiple regression analysis.

Analysis result that receive from SPSS (version 11.5) program calculation, obtained the regression equation:

$$Y = -752952 + 361,105 X_1 + 0,020 X_2 + 2765,239 X_3 + 24,854 X_4$$

Coefficient regression of Unit ship's call (X1) in the amount of 361,105 that show positive direction, where, if Unit ship's call increase 1 unit then will increase General cargo load volume in the amount of 361,15 tons. This will happen if Unit ship's call increase then ship arrival current which enters the Tanjung Perak port increase, then ship's sea freight decrease and in the end cargo's current which will load to Tanjung Perak port will also increase, especially General cargo load volume will increase too.

Coefficient regression of DWT ship's call (X2) in the amount of 0,020 that show positive direction, when if DWT ship's call increase 1 ton, it will increase General cargo load volume as much as 0,020 tons.

Coefficient regression of inflation (X3) in the amount of 2765,239 which show positive direction, when if inflation increases 1% then it will increase General cargo load volume as much as 2765,239 tons.

Coefficient regression of unloading cost (X4) in the amount of 24,854 which show positive direction, when if inflation increase Rp.1, - then it will increase General cargo load volume as much as 24,854ton. It means the increase of unloading cost will have a direct effect on the increase of unloading labors income. This will make them work even harder, then the productivity of unloading labors will also increase and, in the end, unloading volume will also increase.

According to hypothesis influence test of independent variables of unit ship's call (X1), DWT ship's call (X2), Inflation (X3), unloading tariffs (X4) to general cargo load volume (Y) partially in T-test, it results:

- T calculation of unit ship's call (X1) score = 4,517, therefore T calculation (4,517) > Ttable (2,004), resulted rejected Ho and accepted Hi. This show that Unit ship's call (X1) partially have significant effect to general cargo load volume (Y) of the inter-insular ship in Tanjung Perak Surabaya port. If ship's call unit increase then sea transportation service offer will also increase and sea freight's cost decrease, then the demand for sea transportation service will increase. This will make inter-insular ship's load volume increase.
- T calculation of DWT ship's call (X2) score = 1,285, therefore, < Ttable (2,004), resulted accepted Ho and rejected Hi. Partially don't have significant effect on general cargo load volume (Y) of the inter-insular ship in Tanjung Perak Surabaya port. This is caused by general cargo which can load with any kinds of the ship and don't need any special ship. Because of that DWT ship's all fluctuation don't give any effect on General cargo inter-insular ship load volume, but it is different with cargo such as cow, horse, wood log, cars, coals that only can load with the special ship and special unloading service.
- T calculation of inflation (X3) score = 1,629, therefore, < Ttable (2,004), resulted accepted Ho and rejected Hi. Partially don't have significant effect on general cargo load volume (Y) of the inter-insular ship in Tanjung Perak Surabaya port. This is caused by port labor's unloading cost that already set by APBMI with Port administration, GPEI, GINI, INSA on every beginning of the year, so the unloading cost has already given and won't affected by inflation, therefore inflation won't influence general cargo inter-insular ship volume.
- T calculation of unloading cost (X4) score = 16,823, therefore T calculation (16,823) > Ttable (2,004), resulted rejected Ho and accepted Hi. This show that Unit ship's call (X1) partially have significant effect to general cargo load volume (Y) of the inter-insular ship in Tanjung Perak Surabaya port. If unloading labors income increased. This will make them work even harder, then the productivity of unloading labors will also increase; therefore, the opposite.

According to F-test result (simultaneous test) to multiple linear regression equations (can be seen in table 2), obtained Fcalculation in the amount of 132,534. If compare it with Ftable score (with 4 free regression degree and 55 free residual degrees) in the amount of 2,540 then Fcalculation (132,534) > Ftable (2,540). The conclusion is, H0 rejected and H1 accepted, which mean the regression equation that significantly formed or simultaneously unit ship's call (X1), DWT ship's call (X2), Inflation (X3), unloading cost (X4) have significant effect toward of general cargo inter-insular ship's load volume (Y) in Tanjung Perak Surabaya port.

Multiple correlation coefficients (R) score as big as 0,952. With this it can be explain if independent variable of unit ship's call (X1), DWT ship's call (X2), Inflation (X3), unloading cost (X4) simultaneously toward of g have strong connection and have the same direction with general cargo inter-insular ship's load volume (Y) in Tanjung Perak Surabaya port.

According to the calculation results from determination coefficient, it results determination coefficient (R²) score: 90,6%, This show if variation from general cargo inter-insular ship's load volume which can explain by independent variable of unit ship's call (X1), DWT ship's call (X2), Inflation (X3), unloading cost (X4). While the remaining: 100% - 90, 6% = 9,4% explain by other variable that not observe in this research.

RESEARCH LIMITATION

Researcher only observe unit ship's call (X1), DWT ship's call (X2), Inflation (X3), unloading cost (X4) variable in affect general cargo inter-insular ship's load volume (Y) in Tanjung Perak Surabaya port. Along with the research limitation, researcher doesn't observe other variables that may affect towards inter-insular ship's load volume (Y), such as diesel oil, the price of diesel oil and fuel oil prices, transport fares trucks (freight Organda), changes in the value of the dollar towards the rupiah, national political stability, etc.

CONCLUSION & SUGGESTION

Conclusion

According to analysis result and this research discussion, in conclusion: there are 4 independent variables and dependent variable. In other words, independent variable conclude unit ship's call (X1), DWT ship's call (X2), Inflation (X3), unloading cost (X4) simultaneously have a strong connection and same direction with general cargo inter-insular ship's load volume (Y) in Tanjung Perak Surabaya port. If unit ship's call (X1), increase, and then general cargo load volume (Y) also increase. If DWT ship's call (X2), increase, and then general cargo load volume (Y) also increase. If inflation rate (X3) increase, then the selling price of goods which sent to outer island will also increase, then merchant from Surabaya will increase their goods out of island shipment and, especially general cargo to outer island shipment will increase therefore cargo inter-insular ship's load volume will increase too. If unloading cost (X4) being an increase, it will affect to general cargo load volume (Y) to be increased.

Suggestion

1. Domestic/inter-island freight lanes served by national ships and foreign-flagged ships, such as Liner ship or Trumper ship, with significant ratio, the same as inter-insular ship's call in Tanjung Perak Surabaya port simultaneously 2002-2006: 7.986 units of domestic ships, 805 units of foreign ships, 7.466 units of domestic ships, 354 units of foreign ships, 7.956 units of domestic ships, 321 units of foreign ships, 9.369 units of domestic ships, 226 units of foreign ships, 9.139 units of domestic ships, 206 units of foreign ships. Look at the facts that in international freight lanes, Indonesia's ships are still difficult to compete with foreign ships, then Indonesia government, minister of Transportation limit the amount of foreign ships that can operate in domestic/ inter-island freight lanes.
2. In the context regional autonomy, it suggests that each regional governments to develop their port, either physically: sea lanes and port basin dredging, pier construction, Line 1 warehouse, procurement of mechanical tools (land crane, sea crane, forklift, top-loader, etc.) in order to smoother unloading activity as well as administration correction and port management, minimal in port administrator office and port master are adequate, and to make inter-island ships become certain to enter a port that the pioneering harbor status, as long as facilities and infrastructure, minimum there are already technical and administrative.

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The Linkage between Psychological Capital and Public Service Motivation: Evidence from Taiwan

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Abstract

Research on positive organizational behaviors has demonstrated the potential of psychological capital as a predictor of various workplace outcomes. To examine the relationship between Positive Psychological Capital (PsyCap) (Luthans, Youssef, & Avolio, 2007a) and Public Service Motivation (PSM) (Perry & Wise, 1990), this study uses a questionnaire to survey 311 public servants employed by 5 local governments in Taiwan. Regression analysis results indicate that psychological capital is positively related to all dimensions of PSM. Similarly, our findings also reveal that individuals with high psychological capital report higher levels of PSM than do their low PsyCap counterparts. In summary, positive psychological capital can function as a strong predictor of public service motivation.

Keywords: Psychological Capital, Public Service Motivation, Taiwan

INTRODUCTION

Researchers in the field of psychology have given too much attention to the negative side of personal psychology and too little attention to the positive, healthy side. With this in mind, Seligman (1998) called for more investigations into what came to be known as “positive psychology.” This new wave of research focused on the examination of positive organizational behavior, i.e., “the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement” (Luthans, 2002b, p. 59) (see also Nelson & Cooper, 2007; Turner, Barling, & Zaharatos, 2002; Wright, 2003). Accordingly, researchers have empirically examined the role of four specific psychological capacities (hope, resilience, optimism, and efficacy) and their aggregate in the form of a multidimensional construct known as “psychological capital” or “PsyCap” to determine its impact on performance in the workplace (e.g., Avey, Luthans, & Jensen, 2009; Avey, Luthans, & Youssef, 2010; Luthans et al., 2007a; Wright, 2003). Psychological capital (PsyCap) has been defined as “an individual’s positive psychological state of development and is characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success” (Luthans et al., 2007a, p. 3).

Public Service Motivation (PSM) refers to the factors that motivate individuals to seek and continue employment in the public sector. Among the factors that motivate employees in the public sector are a deeper desire to make a difference, the opportunity to have an impact on public affairs, a sense of integrity and responsibility, and a reliance on intrinsic rewards as opposed to a salary or monetary compensation (Brewer, Selden, & Facer, 2000; Crewson,

1997). Public service motivation can therefore be defined as an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions (Perry & Wise, 1990). PSM comprises motives such as compassion, self-sacrifice, attraction to policy making, and commitment to the public interest/civic duty (Perry, 1996, 1997; Perry & Wise, 1990). Perry and Wise (1990) argued that people who are highly motivated to engage in public service are more likely than others to choose government jobs, to perform better in the workplace, and to respond more to non-utilitarian incentives once in government.

Research on positive organizational behaviors has demonstrated the potential of PsyCap as a predictor of various levels of work motivation and performance. PSM is also expected to be influenced by psychological capital. Yet the relationship between psychological capital and public service motivation has never been investigated (and, specifically, not in the Taiwanese context). Thus, the intention of this study is to explore the effect of psychological capital on public service motivation among 311 public servants employed by 5 local governments in Taiwan.

THEORY AND HYPOTHESES

According to Luthans et al. (2007a), PsyCap consists of hope, self-efficacy, optimism, and resilience, the combination of which represents a second-order, core factor. This combination is better at predicting workplace outcomes than any of the four individual factors which comprise it. Therefore, we can discuss the components of psychological capital and their link with public service motivation as follows.

Hope: The first component of positive psychological capital is hope, which is operationally defined as the willpower (or "agency") and "waypower" (or "pathways") to set and accomplish goals (Snyder, Irving, & Anderson, 1991). In the psychological capital framework, hope includes the wherewithal to devise methods, means and alternatives to accomplish objectives and goals, even under institutional constraints or adverse conditions (Snyder, 2000; Snyder et al., 1991; Curry, Snyder, Cook, Ruby, & Rehm, 1997). In other words, hope constitutes the will to succeed and the ability to develop various pathways or strategies toward goal accomplishment. Thus, we expect that despite the public sector's characteristically tight budgets and rigid regulations, hopeful individuals will still tend to seek and continue public employment.

Self-efficacy: The concept of self-efficacy is perhaps the most well-known and widely researched concept in the psychological capital framework. Self-efficacy was introduced by social psychologist Albert Bandura (1997) and can be defined as one's belief in one's personal ability to accomplish a given task. Stajkovic and Luthans (1998) go on to define self-efficacy as "the employee's conviction or confidence about his or her abilities to mobilize the motivation, cognitive resources, or courses of action needed to successfully execute a specific task within a given context" (p. 66). Self-efficacy is derived from four processes: (a) past mastery of a task, (b) vicarious learning via observation of a respected other, (c) social persuasion from a significant other, and (d) physiological and/or psychological arousal. In summary, people with a high level of self-efficacy believe that they can be successful, and they act positively on that belief. Self-efficacy is also expected to be associated with public service motivation, especially the personal need for power and self-importance.

Optimism: The third component of positive psychological capital is optimism. Optimism refers to one's personal assurance that activities or circumstances will result in a positive outcome. According to attribution theory, optimists tend to consider negative events as external ("not my fault"), unstable (occurring only at this time), and specific (this single event), while

pessimists interpret the same events as internal, stable, and global (Peterson, 2000; Seligman, 1998). Optimists also continue to work hard and actively cope with any obstacles to their pursuit of the desired outcome (Carver & Scheier, 1981; Kluemper, Little, DeGroot, 2009). In sum, optimists tend to maintain positive expectations about the results (Avey, Wernsing, & Luthans, 2008). Therefore, optimism is expected to be positively related to the attainment of conditions that serve the public interest or the common good, which is a specific motive grounded primarily or uniquely in public institutions

Resilience: The fourth component of positive psychological capital is resilience, which is defined as “the positive psychological capacity to rebound, to ‘bounce back’ from adversity, uncertainty, conflict, failure or even positive change, progress and increased responsibility” (Luthans, 2002a, p. 702). Resilient people are tenacious and will continue to move forward in the face of seemingly impossible obstacles and odds. Thus, they are expected to exhibit a stronger propensity toward self-sacrifice and commitment to civic duty—and possibly policy making and compassion as well—than do those with lower levels of resilience.

Based on this emerging theoretical foundation for PsyCap, the following hypothesis was formed.

Hypothesis 1: Psychological Capital is positively related to Public Service Motivation.

Hypothesis 2: The effect of Psychological Capital on Public Service Motivation will be different for public employees who have different levels of PsyCap.

METHOD

Participants

A questionnaire survey was completed by 500 public servants employed by five local governments (Chiayi City, Chiayi County, Tainan City, Kaohsiung City, and Pingtung County) in southern Taiwan. There were 311 valid surveys returned, yielding a response rate of 62.2%. Of the respondents, 59.5% were male. In terms of age, 47.3% of respondents were 39 years or under, 33.1% were between 40 and 54 years old, and the remaining 19.6% were age 55 or over. The majority of the respondents (79.5%) held college degrees, with 10% having obtained masters or doctoral degrees.

Measures

The Psychological Capital Questionnaire (PCQ) developed by Luthans, Avolio, Avey, and Norman (2007b) was used to measure Psychological Capital. Examples of the items include: “I feel confident analyzing a long-term problem to find a solution;” “If I should find myself in a jam at work, I could think of many ways to get out of it;” “When I have a setback at work, I have trouble recovering from it and moving on;” and “When things are uncertain for me at work, I usually expect the best.” The reliability of the Psychological Capital measure was $\alpha = .885$.

Items in the questionnaire used to measure the PSM constructs were adapted mainly from Perry (1996). Sample items include: “Politics is a dirty word (reversed);” “The give and take of public policy making does not appeal to me (reversed);” “I consider public service my civic duty;” “It is difficult for me to contain my feelings when I see people in distress;” and “Serving citizens would give me a good feeling even if no one paid me.” The reliability of the PSM measure was $\alpha = .828$.

All items in the questionnaire were rated on 5-point Likert-type scales anchored by 1 = “strongly disagree” and 5 = “strongly agree.” To ensure equivalence of the measures in the

Chinese and the English versions, all the scales used in this study were translated into Chinese, and then back-translated by a colleague of the author from the Department of Foreign Languages and Literature at National Sun Yat-Sen University.

Results

Regression analysis was applied to test the effect of psychological capital on public service motivation, while controlling for demographic variables such as tenure, age, education, and gender. In his examination of the antecedents of PSM, Perry (1997) suggested that these demographic controls may be highly associated with PSM. Descriptive statistics for the psychological capital and PSM measures and intercorrelations are shown in Table 1.

Overall, the findings fully supported both hypotheses. The results of the regression models for PSM, all of which were significant at $p < .001$, are presented in Table 2. PsyCap was positively related to all dimensions of PSM: attraction to policy making, commitment to public interests, compassion, and self-sacrifice. This finding supports the first hypothesis that psychological capital is positively related to public service motivation.

The statistical results of regression models for the effect of PsyCap on PSM were also contingent on demographic controls. In general, tenure, age, education, and gender do exert a moderating effect on the relationship between PsyCap and PSM. For example, given the effect of PsyCap on PSM, males were more likely than females to have higher levels of policymaking participation and self-sacrifice, though their levels of compassion were comparatively lower. Similarly, high- and medium-ranking officers were more likely to have higher levels of PSM for self-sacrifice, commitment to public interests, and the pursuit of decision-making power than those of their lower-ranking counterparts. In comparison with younger public employees, public servants over the age of 40 were more likely to have higher levels of PSM in public interest, compassion, and self-sacrifice.

Table 1. Descriptive Statistics and Correlations for Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1.Hope	3.33	1.38	1									
2.Efficacy	3.12	1.27	.55**	1								
3.Optimism	3.47	1.02	.33**	.30**	1							
4.Resilience	2.76	.99	.33**	.29*	.43**	1						
5.PsyCap	3.17	1.02	.62**	.60**	.53**	.52**	1					
6.Policymaking	2.80	1.35	.48**	.55**	.36**	.40**	.57**	1				
7.PublicInterest	3.32	.85	.21*	.35**	.08	.03	.25*	.39**	1			
8.Compassion	3.49	.84	.21*	.27*	.06	.04	.20*	.25**	.23*	1		
9.Self-sacrifice	3.01	.93	.19*	.19*	.03	.02	.17*	.30*	.21*	.24*	1	
10.PSM	3.16	.83	.42**	.50**	.23*	.22*	.46**	.60**	.52**	.47**	.49**	1

Notes: PsyCap = Core Positive Psychological Capital consisting of Hope, Self-Efficacy, Optimism, and Resilience.

PSM = Total Public Service Motivation consisting of attraction to Policymaking, commitment to Public Interest, Compassion, and Self-sacrifice.

Numbers on the diagonal are correlation coefficients. * $p < .05$, ** $p < .01$ (two-tailed)

Table 2. Regression Models for the Effect of PsyCap on PSM

Predictor Variables	Public Service Motivation							
	Attraction to Policymaking		Commitment to Public Interests		Compassion		Self-sacrifice	
	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>
PsyCap	.925***	20.911	.305***	5.963	.318***	6.461	.326***	6.201
Control Variables (dummies)								
Tenure1	-.123	-.883	.346*	-2.149	.010	.067	.452**	2.730
Tenure2	.668***	6.095	.231	1.823	.155	1.270	.585***	4.488
Age1	-.086	-.763	.282*	2.160	.587***	-4.672	-.062	-.465
Age2	-.101	-.875	.098	.732	.411**	3.182	.483**	3.503
Education Level1	.335*	2.257	.213	1.239	.690***	4.180	.605**	-3.429
Education Level2	.155	1.615	.218	1.960	.519***	4.850	.809***	-7.082
Gender	.305**	2.916	.179	1.474	-.759***	6.515	.594***	4.768
N	311		311		311		311	
R²	.417		.178		.209		.253	
F	168.661		22.977		26.073		31.279	
Significance	<i>p</i> < .001		<i>p</i> < .001		<i>p</i> < .001		<i>p</i> < .001	

Notes: Coding of dummy variables: Tenure 1 = 1 for high-ranking officers, 0 otherwise; Tenure 2 = 1 for medium-ranking officers, 0 otherwise; Age 1 = 1 for 55 years or older, 0 otherwise; Age 2 = 1 for 40-54 years old, 0 otherwise; Education level 1 = 1 for master's degree or higher, 0 otherwise; Education level 2 = 1 for bachelor degree, 0 otherwise; Gender 1 for male, 0 for female. * *p* < .05, ** *p* < .01, * *p* < .001.**

To determine whether the effect of PsyCap on PSM will be different for public employees with different levels of PsyCap, this study divided respondents into two groups based on their scores on the total scale of PsyCap. Respondents whose scores on the total scale of PsyCap were higher than the mean score of all respondents (*M* = 3.17) were placed in the high PsyCap group (*n* = 173), whereas respondents whose scores on the total scale of PsyCap were lower than the mean of all respondents were classified as belonging to the low PsyCap group (*n* = 138). Table 3 presents the results of regression analysis of the effect of PsyCap sub-constructs on PSM in both the high and low PsyCap groups. Table 3 shows clearly that that R2 values were .398 and .206 for the high-PsyCap and low-PsyCap groups, respectively. This implies that psychological capital influenced 39.8% of the variance in PSM in the high-PsyCap group, while influencing only 20.6% of the variance in PSM in the low-PsyCap group. This finding supports the second hypothesis, since individuals with high psychological capital reported higher levels of PSM than did their low PsyCap counterparts.

Table 3. Regression Results for High and Low PsyCap Groups

Predictor Variables	Public Service Motivation			
	PSM (High PsyCap >3.17)		PSM (Low PsyCap <=3.17)	
	β	<i>t</i>	β	<i>t</i>
Hope	.705***	11.580	-.083**	-2.886

Self-Efficacy	.064	1.052	.021	.320
Optimism	.187***	3.944	.137**	3.110
Resilience	-.531***	-9.389	.317***	6.367
N	173		138	
R²	.398		.206	
F	97.033		34.023	
Significance	$p < .001$		$p < .001$	

Notes: * $p < .05$, ** $p < .01$, *** $p < .001$.

CONCLUSION

The results suggest that psychological capital is closely related to the four dimensions of public service motivation. As expected, positive psychological capital can function as a strong predictor of public service motivation, and individuals with high psychological capital report higher levels of public service motivation than do their low PsyCap counterparts. This study enriches the present literature in several ways. First, this is the first study in which a close association is shown between Positive Psychological Capital and Public Service Motivation in the Taiwanese context. The applicability of the Psychological Capital Questionnaire (PCQ) (Luthans et al., 2007b) survey in the analysis of PSM in the Taiwanese setting was verified. Second, in addition to such demographic antecedents as tenure, age, education, and gender (Perry, 1997), psychological capital was found to have a significant impact on PSM. This implies that public employees who differ in PsyCap traits tend to have different PSMs. It also implies that by seriously cultivating positive psychological states and organizational behaviors, public organizations will enhance their employees' motivation to deliver high-quality public service. One limitation in this study is that the data were obtained using self-report measures. The results may, therefore, be biased by such things as common method variance or social desirability. It would be appropriate to complement these measurements with others obtained by different methods.

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Customer Retention Management Strategies adopted by the Freight Transport Service sector in Ghana. A Review Paper on Related Literature

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Abstract

Achieving customer retention in freight transport sector provides survival for the firms. The varied economic benefits associated with the adoption customer retention management cannot be over-emphasised as it can lead to the overall profitability of firms. This paper review address both theoretical and empirical literature on Customer Retention Management Strategies adopted by the Freight Transport Service sector in Ghana. This paper seeks to explore variables, which may be considered in any Customer Retention Management Strategy and Customer Retention by drawing together strands from various literature on: strategies and analytical approaches for managing customer defections in the freight transport industry in Ghana; customer defection groups, and the reasons for their defections, and the significant role played by Life time value of the customer (LTVC) theory to freight transport businesses in Ghana; models which can be adopted to manage customer defections in the freight transport industry in Ghana; and the actual switching barriers that can be adopted by the players in the freight transport industry in Ghana to promote customer retention.

Keywords: Customer retention management strategies, Switching barriers, Freight Transport, Ghana

INTRODUCTION

Over the years, customer services have been considered important factor in customer retention management strategies. Potter-Brotman (1994), believes that the role service in every economy plays is more critical and crucial than ever, - a trend which will continue. Specifically, transport serves as physical linkage between clients and suppliers, thereby facilitating flow of materials and other resources. It can be maintained further that with the introduction of third party logistics (abbreviated 3PL, or TPL refers to a provider of a firm's outsourced logistics services) providers and even fourth party logistics (abbreviated as 4PLs - refers to integration, assemblage and management of all resources, capabilities and technology of a firm's Supply Chains and its range of providers), majority of carrier service firms provide more than just physical transport links. Such carrier service firms provide functions which include value addition services which range from inventory control and warehouse management (Naim, Potter, Mason, and Bateman, 2006). In transport business, while 3PL

application refers to any service contract that involves storing or shipping logistics, a 4PL provider is regarded as a supply chain integrator.

It is established in literature that logistics system adopted by industrial firms is basically linked with freight transport systems at all stages of procurement, production and distribution of goods to the final consumer. By freight transport, Crainic and Dejax (1990) mean that all the supply chain activities and functions are said to be performed by one or several carriers, using one or several modes of transportation, to move freight of varied commodities, from multiple clients (cities), between several locations. Humans are all the time involved in the development of various applications in the areas of distribution systems planning and facility location for industrial production or transport firms, as well as the medium-term service network design and the tactical planning of operation for freight transport firms (Crainic and Dejax, 1990).

The role played by the road haulage sector is key to any national economy with users boasting of huge spending budget. Experts group the freight transport industry into two core hauliers — own account and hire and reward. Own account operators include manufacturers or distributors who can boast of their own fleet of transports available to serve their own standards and requirements. The services of hire and reward hauliers are offered to third parties. Experts believe that the hire and reward haulier sector is experiencing an increasing growth, as growing numbers of stakeholders such as manufacturers, distributors and retailers suggest that the function of physical distribution of goods should be performed by transport firms (ibid).

In Ghana, it can be submitted clearly that the vast majority of freight service functions are performed by road hauliers, largely because of its cheapness and flexibility and it is anticipated that this is unlikely to change in the foreseeable future since less attention is paid by the state towards other modes of transport like air, rail and sea. That is to say that the freight transport service sector is characterised with fierce competition which has been, and will remain severe as the entry barriers continue to be low. Defending this position, Duffy (1985) stresses that certain customers who purchase freight transport services, also operate in highly competitive markets, hence the onus lies on freight transport firms to pay increasing attention to improving the services rendered to the customers. That is, the industry has been characterised with features of excess capacity, low barriers to entry and high levels of competitive rivalry among players who are always confronted with the enormity of the task in meeting the ever increasing demands of powerful customers. Crainic and Dejax (1990) are of the view that it is always anticipated that customers in the freight transport industry are becoming more aggressive in their quests in seeking out and defecting to competing suppliers who could meet their demands whereas, other competitors who were unable or unwilling to do so are deselected by customers. This stands to reason that as the freight transport market is becoming increasingly competitive, players are advised constantly to adjust to and to meet customers' needs and requirements profitably while offering flexible, reliable, high quality and low cost services.

The current reviewers of this paper perceived that the freight transport sector is considered as vital element of all economies across the globe since transportation and distribution of goods have significant effect on the performance of basically all the sectors of economies. Functionally, the freight transport sector serves as the backbone of production, trade, and consumption activities thereby ensuring effective movement of raw materials and finished products at the right time (Crainic, 2000), advancement of globalisation, increases connectivity

of markets and businesses, and finally simplifying movement of freights and people (Vetevoed, 2008).

The discussion so far suggests that the function performed by freight transport is key to ensuring a smooth, cost- and timely fulfillment of customers' requirements. Hence this view brings to the fore, the sole purpose of every business, which according to Peter Drucker (1973), is "to create the personality called customer". This position is also supported by Ofori-Okyere (2014) in his book "Customer Communications, Theories, frameworks and concepts", which made it clear that managers of today's businesses in their quests of attracting, acquiring, and maintaining today's customer for a lifetime business transaction, should pay particular attention to the needs and requirements of the customer which are becoming ever increasing in demands.

A position held by authorities is that in order for businesses to survive in today's competitive marketplace, managers must allocate more funding in their implementation of customer retention management programmes when their market share is experiencing increasing growth, and finance customer acquisition efforts when their market share is falling (Fruchter and Zhang, 2004). Lee, Lee, Feick(2001), sharing similar perspective posit that as market growth declines or as markets remain highly competitive, players in such competitive environments usually adopt strategies in maintaining their market share through paying attention to retain existing customers. Business organisations achieve this by continually seeking new ways of acquiring, retaining, and increasing their marketing activities due to the fact that there is rising cost to be incurred when it comes to losing customers (Petzer, 2005). Choi and Chu (2001), stress that businesses that are capable of attracting, satisfying, and retaining customers are said to survive than the ones which do contrary. It is advocated in a more benign manner that customer retention management strategy is considered as more reliable source of superior performance (Reichheld and Sasser, 1990), which in this way can be adopted as a marketing programme by freight transport firms in Ghana.

The authors of this review paper perceive that customer retention management strategies comprise series of marketing programmes (approaches) to be adopted by each freight transport service provider in Ghana to prevent customers from defecting to alternative competing service firms. In the main, it can be understood that successful customer retention management strategy as a core marketing strategy commences with the organisation making its first contact with the customer and also spans throughout the entire relationship chain. The demand for freight transport services is almost entirely derived and the fate of the industry as a whole is closely related to the state of the economy, since any reduction in consumer demand, which causes output by manufacturers to fall, leads inexorably to reduce demand for transport and vice versa (Whyte, 1993).

The current authors maintain that despite a lot of empirical studies done in the broad areas of transport and logistics, customer retention management and their related subjects there is little known literature with specific examination done on customer retention management strategies in the Freight Transport service sector specifically in Ghana. Whyte (1993), researched on "The Freight Transport Market: Buyer-Seller Relationships and Selection Criteria, and found that buyers are both demanding and active in the market with the result that over the last decade, they have replaced suppliers whose performance was regarded as inadequate. Stank, and Goldsby(2000), researched on "a framework for transportation decision making in an integrated supply chain" and concluded that "managers must motivate their companies to view the total cost and total value provided by carriers, and desist from buying transportation solely based upon lowest transactional cost." Mason, Lalwani, and Boughton

(2007), investigated on “Combining vertical and horizontal collaboration for transport optimisation”, Supply Chain Management” in the UK and the European environment with specific reference to road freight transport industry: the authors recommended similar study to be conducted in other industrial settings for alternative transport modes and other geographical region. Naim, Potter, Mason, and Bateman (2006), aimed to develop “a framework that rationalises transport flexibility into different types,” and identified twelve definitions and key components of transport flexibility.” Holter, Grant, Ritchie and Shaw (2008), studied "A framework for purchasing transport services in small and medium size enterprises in the UK environment and indicated that “a framework using several tools for purchasing transport services and improving transport performance has emerged from the research.” Sanchez-Rodrigues, Potter, and Naim (2010), studied “the impact of logistics uncertainty on sustainable transport operations” in the UK environment, and found that “the main drivers that influence the sustainability of transport operations are delays, variable demand/poor information, delivery constraints and insufficient supply chain integration.”

In a related development which is in the area of customer retention management, Buttle and Ahmad (2002), dealt with “Customer retention management: a reflection of theory and practice for UK firms and recommends that “both theoreticians and managers should consider business context in developing and implementing customer retention strategies.” Petzer(2005) studied “Customer Retention Management for the Hotel Industry in Gauteng and concluded that service businesses such as hotels retain customers by making sure they are compatible with each other, by keeping track of, and managing customer defections, by addressing service failure with recovery strategies, and by keeping long-term value-creating relationships with their customers. Ang and Buttle (2006), did a quantitative study on customer retention management processes in the Australia market and concluded that “excellence in customer retention is significantly associated with documented complaints-handling processes.”Anani (2013), studied “customer retention strategies in the airline industry in Ghana and concluded that airlines can only survive in today’s competitive but volatile business environment when they pay particular attention to the effective implementation and monitoring of four strategies(Relationship Marketing (RM), Airline Service Quality (ASQ), Airline Switching Barriers (ASB) and Service Recovery (SR)) to ensure their continued use and application to guarantee customer retention and overall profitability of airlines. Martey (2014), investigated into “the Relationship between Customer Retention and Customer Loyalty in the Restaurant Industry in Ghana”, and found that all the four constructs of customer retention; namely price, service quality, customer satisfaction, and brand image had significant correlation with customer loyalty.

Coherently with above discussions, it can be submitted clearly that despite the extant body of research done on both transport and customer retention management as separate topics, the attempt of merging the two business concepts hence an examination of customer retention management strategies in Freight Transport Service Industry in Ghana is said to be under-researched. That is merging the two topical issues in research, it is worth mentioning that panoply of extant studies have reviewed literature on customer retention management in other industry such as the Hotel (Petzer, 2005), telecommunications Gustafsson, Johnson, and Roos, (2005), airline(Anani,2013), Restaurant (Martey, 2014), but little is known in Freight Transport service sector and even in Ghana.

It is safe to submit that extant studies have failed to establish in specifics, what constitute specific models vis-à-vis strategies (approaches and programmes) to be used in managing customer defections; and factors that constitute switching barriers to promote customer

retention in the freight industry in Ghana. Existing literature on customer defection, and retention management strategies lack specificity hence a detailed explanation needs to be done into it. It is in this regard that the general objective of the present paper is to offer a review to contribute to the topic: an examination on customer retention management strategies from the perspective of freight transport businesses in Ghana. For its focus, the review seeks to achieve the following as specific objectives:

(1) To identify strategies and analytical approaches for managing customer defections in the freight transport industry in Ghana. (2). To determine customer defection groups, and the reasons for their defections, and the significant role played by Life time value of the customer (LTVC) theory to freight transport businesses in Ghana. (3). to describe in detail, models which can be adopted to manage customer defections in the freight transport industry in Ghana. (4). to explore factors that constitute switching barriers that can be adopted by the players in the freight transport industry in Ghana to promote customer retention.

LITERATURE

The theoretical considerations in this review cover analytical approaches that are useful in the identification of core reasons that account for customer defections; customer defection groups, and the reasons for their defections, and the significant role played by life time value of the customer (LVC) theory; and the description of proven models which can be adopted to manage customer defection; and the exploration of factors that constitute switching barriers.

Strategies and analytical approaches for managing customer defections

Management of customer defections has been emphasised in extant researches (e.g. Ahmad, 2002; Dove and Robinson, 2002; Pearson and Gessner, 1999). It is suggested that business organisations have to make extra effort in instituting, monitoring processes and control devices that are capable of alerting managers of customer defections. In the case of the freight transport industry, this will enable players to reduce customer defections by instituting instant follow up actions or responses that are capable of identifying and eliminating customers who are considered unprofitable.

Reicheld and Sasser (1990), maintain that business organisations should provide a defection analysis. This is accomplished by motivating service personnel to ask definite, related questions about why particular or a group of customers have defected. This is to suggest that business organisations need to be sensitive on the issue of defection rates (Colgate ET al.1996). Top management commitment is needed in the freight transport industry when there is the need for allocating resources to handle causes associated with defection.

It can be summed up that a tactfully designed and accomplished study about customers who had defected over a period can provide effective information to be used to identify core reasons that account for customer defections, investigate attitudes of employees toward service quality, develop a better understanding of the customer's process for terminating the business relationship (so that appropriate intervention and recovery actions can be taken), and discover whether or not there is an identifiable profile for customers who had defected and which may be used for the early discovery of customers at risk (Corner, 1996). Payne (2000a), suggests four analytical approaches for managing customer defections:

- Purposely trained marketing researchers should be recruited to undertake a tactical analysis of the core reasons that underpin why customers defect in businesses. In this way, the business can identify poorly delivered business practices that need strategic improvement and modification. These efforts are capable of resulting to recover the

customer and to salvage the poor relationship (Reichheld, 1996), existing between the parties, in this case are the freight transport firms and their customers.

- The business should undertake critical marketing research to identify the aspects of the service been delivered that are key or crucial when it comes to retaining a customer for the purposes of valued relationships.
- The business should benchmark its performance on critical customer service activities against what is done successfully in the competition.
- The business should carefully and tactfully analyse customer complaints received. Zineldin (2006), on the subject of customer retention stresses that firms that adopt customer retention strategies and programmes must first of all be responsive to their customers' needs and concerns through putting in place an effective programme that addresses customers' concerns through a good complaint management system.

Customer defection groups, reasons for their defections, and the role of life time value of customer (LTVC)

Customer defection is explained as a critical situation where customers leave and abandon a service provider and opt for another (Garland, 2002). Similarly, customer defection rate had been explained to be the degree to which customers terminate the relationship they have had with businesses over a period (Page et al., 1996). Reichheld (1996), reporting on the effect of defections stresses that an increase in the defection rate can lead to decrease in cash inflow to an affected organisation. It is suggested that reduction in customer defection rate is likely to lead to increase in profits substantially more than growth in market share, improved profit margins, or factors associated with competitive advantage (Colgate et al., 1996). A lot of service organisations sometimes fail to pay particular attention to customer defections, that is, customers who change service providers for competing ones.

Authorities with empirical studies on customer defection (e.g. Desouza,1992; Matin-Consuegra, Molina and Esteban,2007; Seawright, DeTienne, Bernhisel and Hoopes Larson,2008) list the following as customer defection groups: There are customers who switch to competitors just because of lower prices; customers who switch to competitors just because they are offering better products or services; customers who leave because of inadequate products or services offered by an existing provider; customers who are lost because they are no more in business (in the case of B2B); customers who switch to products and services provided by other companies found outside the industry; and lastly, customers who leave due to internal and external political considerations.

Ahmad (2002), suggested to managers of firms to make extra efforts regarding instituting control mechanisms that are capable in keeping track of customer defections. Similarly, Dove and Robinson (2002), advocate for the existence of development of systems capable of alerting organisations when their customers threaten to defect so that the situation can be averted.

Given the customer groups who engage in defection, Anani (2013), postulates that there are a number of reasons that account for customers defecting to competing companies and their brands as follows:

- For product reasons: This refers to customers who want to experience better and quality product offered by a particular competitor and willing to perceive the competitor's product as being superior.
- Marketing reasons: There are customers who leave the entire market thereby being considered as lost to the organisation and its competitors.

- Technological reasons: There are customers who may defect because of technological discoveries seemed to be lacking in the firm they have dealings with but exist in another and perceived to be capable of satisfying their needs or wants.
- Price reasons: There are customers who may likely defect to competitors because of lower prices and would defect as soon as they can obtain better prices elsewhere (Martin-Consuegriga et al, 2007).
- Service reasons: There are customers who may likely defect due to poor services offered by the existing provider (Seawright et al, 2008).

By identifying reasons why customers may defect, it can be said that organisations may be in the best position to adopt strategies to combat customer defections in order to attain high levels of customer retention by satisfying their needs or wants through good customer service delivery (Mostert, De Meyer and Van Rensburg, 2009). It is instructive to note that in an attempt to comprehend the complete influence defections have on businesses, managers must identify the LTV of each single customer of theirs. LTV is a prediction of the netprofit attributed to the entire future relationship with a customer (Lovelock and Wirtz, 2007).

A number of empirical studies on the subject "value of a customer" (e.g. Claycomb and Martin, 2001; Trubik and Smith, 2000; Kurtz and Clow, 1998), report that the value of a customer will also increase over time due to the underlying reasons:

There is the case of increasing initial costs always incurred in attracting and acquiring a new customer; Customers are likely to utilise services more recurrently over time; Service firms become more efficient in delivering services over time; Existing customers refer or recommend others to the business; Existing customers may generate positive word-of-mouth advertising, which is supposed to be among the most powerful and impartial sources of influence in the marketplace; Businesses can slowly increase their prices because of the apparent quality and dependable service they provide.

Best (2005), contends strongly that the marketing costs a business may incur to ensure customer satisfaction is small in comparison to the benefits the business will derive from customer purchases and the cost savings of customers not defecting. Petzer (2005), maintains that although it is not realistically achievable, business organisations must strive at least aim at creating a zero-defection culture.

Models that can be adopted to manage customer defections and to promote retention

In managing customer defections, certain models play key role. Sampathkumaran (1994), suggested a five-step analytical process called 'customer migration analyses' as a way to help business organisations to stay on top of competition, and prevent, customer defection. The author contends that 'customer migration analysis' should be practised as a continuous, dynamic process that will enable marketers to monitor customer performance against benchmarks, predict and prevent customer defection, foster loyalty, and realise a return on investment.

The steps in the customer migration analysis according to (Sarnpathkumaran, 1994), include the following:

- Managers should spot migration groups based on their expenditure. Divide customers into groups: those that have increased spending, those that have reduced spending, those that have sustained spending, those that have stopped spending, and those that have resumed spending.

- Managers should create profiles of the groups with the use of available information such as the number and nature of transactions, demographic characteristics of customers, and survey results.
- Managers should endeavour to ascertain previous and potential return on investment (ROI) of each of the migration groups. Compare information on promotion efforts (the budget assigned to acquire and retain customers) directed at these groups to assess ROI.
- Managers should establish future resource allocation. Make the most of the return on future investment by striking a balance between acquiring, advancement, and retaining efforts. Take the extent of the customer base, the possible prospect population, the stage in the product life cycle and competition into account when allocating resources.
- They should monitor the migration groups and evaluate the ROI continuously.
- Colgate et al. (1996), proposed a four-step process that businesses must follow in order to reduce defection rates and capture quality and more profitable defectors:
- Managers must ascertain what constitute defection rate.
- Managers must determine the cost associated with the actual defection rate. This is done by: (a) calculating the value of an average customer over his or her lifetime; (b) approximating the current value of such customers at the current rate of defection; and (c) calculating the increase in profit that could be realised if the defection rate is reduced. This indicates the cost of the defection rate.
- Managers should identify a mix of enticements that will persuade customers to remain loyal to the business.
- Management should channel resources to areas of business that will entice customers to stay.
- Page et al. (1996), suggest a six-step analytical process for the assessment of the impact of customer defection on business organisations, which include:
- Managers drawing up profiles on contributions of each individual customer. A contribution profile is referred to as a customer's contribution to income in relation to the number of purchases made throughout the duration of the customer's relationship with the business.
- Managers determining the rate at which customers defect and how it fluctuates over time.
- Managers establishing the anticipated financial value of every new customer over his or her lifetime, and see how this fluctuates over the expected customer lifetime.
- Managers ascertaining the overall customer base of the business organisation.
- Managers determining the eventual contribution of the customer base and how it fluctuates when projections are altered.
- Managers deciding on marketing mix strategies needed to create a balance between acquiring and retaining customers.

Factors that constitute actual switching barriers

A switching barrier can be defined as any factor that makes it difficult or costly for customers to change service providers (Jones, Mothersbaugh and Beatty, 2002). Following this definition, Anani (2013), assumes that the term switching barrier or switching cost can be used interchangeably though some authorities try to differentiate the two concepts based on what they aim to achieve. Ranaweera and Prabhu (2003), perceive the concept as constraints intentionally created by service providers to essentially prevent all acts of switching on the part of customers. From this viewpoint, Gronhaug and Gilly (1991), argue that a dissatisfied customer may remain loyal because of a business high switching costs instituted. It is

suggested that the costs of switching to competitors tend to be higher for services than tangible goods (Gremler and Brown, 1996).

In classifying switching barriers, authorities on the subject (e.g. Jones et al., 2002; and Vazquez-Carrasco and Foxall, 2006), have attempted their categorisation under the following factors: Switching cost, and Interpersonal relationships. Cross-selling (Daniell, 2000) and up-selling (Ofori-Okyere, 2014) have been identified as also important factors that need to be taken into consideration when planning against customer switching.

Switching cost

This paper review has identified factors as well as approaches from the academic literature which may have managerial importance when it comes to assigning reasons that account for customer defections in the freight transport industry in Ghana. Notably, a panoply of published studies have empirically tested switching costs as a main determinant of customer loyalty in consumer markets (Gremler, 1995), as well as business-to-business service context. Most of these studies report on the various proven strategies that business organisations can adopt to minimise customer defections (Reicheld and Sasser, 1990; Colgate et al.1996; Corner, 1996; Pearson and Gessner, 1999; Ahmad, 2002; Dove and Robinson, 2002), with the general objective to achieve customer retention for their businesses.

Switching cost is considered as the buyer's perceived costs (both monetary and non-monetary) involved in switching from the existing to a new supplier (Heide and Weiss, 1995). These include the cost of changing services in terms of time, monetary and psychological expenditure (Dick and Basu, 1994). Porter (1998), defines switching cost as the cost that a customer incurs when changing from one service provider to another. It is also described as the perception of the magnitude of an additional cost to be incurred to terminate a relationship and securing an alternative one (Patterson and Smith, 2003).

However, multiple conceptualisations exist for switching cost and these are reflected in diversity of forms including psychological, physical, and economic (Jackson, 1985); continuity costs, learning costs, and sunk costs (Guiltinan, 1989). Burnhan, Frels and Mahajan (2003), provide a more detailed and comprehensive but succinct categorisation of switching costs to include procedural, financial and relational costs. In spite of these multiple conceptualisations and classifications, switching cost can broadly be grouped as economical and psychological. For example, the economic risk cost identified within the procedural dimension of switching cost refers to the psychological costs due to perceived risk from the uncertainty of trying new products or service. The psychological switching cost such as uncertainty related or loss in relational investments and social bonds or other procedural costs (relating to time, search, evaluation and set up) have been found to have major impact on switching barrier (Jones et al., 2002).

Even the sunk cost which is primarily economic in nature becomes psychologically significant in assessing the perceived switching cost (Jones et al, 2002). These psychological costs span the entire switching process and beyond, making switching cost more than just a one-time cost (Wan-Ling, 2006). This is because customers may consider even the post switching behavioural and cognitive dissonance costs when switching and can therefore be considered as part of switching cost (Klemperer, 1995). In practice, switching cost is considered consumer specific and its nature varies depending upon the industry and the product or service characteristics (Gummesson, 2006).

Interpersonal relationship

Interpersonal relationship established between customers and service providers is deemed imperative as it goes a long way to benefit the two parties mutually and at the same time serve as a switching barrier that helps to keep customers to a particular business. For superior customer service to experience a success, firms must boast of well trained, motivated and satisfied employees' base. Wong and Sohal (2003), posited that good relationship through good customer service can improve satisfaction, and help keep customers stay loyal to a company.

Customer service is defined as a system of activities that encompass customer support systems, complaint processing, speed of complaint processing, ease of activities complained about and friendliness when reporting complaints (Kim, Kliger and Vale, 2004), reliable delivery, fast / just-in-time delivery, installation of computerised reorder systems, provision of fast accurate quotes, detection of reduction right first time, etc.(Ofori-Okyere, 2014). Customer service can produce customer behaviours that can indicate whether a customer will remain with an organisation or defect from it (Zeithaml, Berry, and Parasuraman, 1996). In a more specific relation with the airline industry in Ghana, Anani (2013), maintain that the high level of competition that pertains in the travel industry has necessitated the implementation of excellent customer service techniques to satisfy and retain customers. An efficient customer service is likely to enhance customer retention and to reduce switching between and among service providers. Therefore superior customer service includes all help and assistance freight transport service firms can provide to clients directly or indirectly prior to, during and/or after receiving the service to provide exciting customer experience. If well leveraged, it has the potential in serving as a switching barrier and at the same time offer a competitive advantage to all the players in the freight transport industry and also enable them attract and retain customers. Anani (2013), further adds that relationship marketing, service quality, and service recovery are customer retention strategies.

Cross-selling

Cross-selling is explained as a switching barrier approach strategically adopted for the purpose of increasing revenues by selling new or additional products and services, whereas, up-selling also refers to the purposes of increasing revenues by selling upgraded, more expensive products or services to a customer segment which in other words referred to as upgrades (Ofori-Okyere, 2014), which aim of retaining them. The two strategies are said to have positive impacts on a firm's return on investment and overall profitability, because loss of market share and diminishing opportunities to engage in cross-selling and up-selling as a marketing strategy weighs heavily on a firm's profitability and continued existence.

CONCLUSION

The main effect of creating switching barriers is to ensure customer retention (Lee, Lee and Feick, 2001). It can be inferred from the reviewed literature that switching barriers entail interpersonal relationships, switching costs, attractiveness of alternatives) regarding the propensity to stay with service providers (Jones et al. 2000, Patterson and Smith 2003). In as much as customer satisfaction and loyalty are viewed as important components of customer retention management strategy, Bendapudi and Berry (1997), stress that these two components are not the only strategies to be considered for customer retention management strategy but barriers to customer defection such as the development of strong interpersonal relationships or the institution of switching costs may also represent additional customer retention strategies. In this vein, Jones et al, (2000), also added that a well trained, professional, and satisfied employees' base can also provide positive switching barriers.

In sum, it can be concluded reasonably that there are certain effective strategies that business like freight transport firms need to adopt to prevent customer defection and to achieve retention. They are as follows:

First, Reicheld and Sasser (1990), state that a service firms probably cannot eradicate all defections, but they can and should minimise defections. If a business decides to embark on a zero-defection approach, it should be prepared to recognise customers who leave, and then investigate and act on the information these customers provide. The rationale for getting information about those customers who leave is to find out from them why they are doing so. Customers who leave can provide an information about the business that is not visible to all the employees inside it. The main objective is to use defections as early warning signals in order to learn from defectors about the business, and use this information to improve on their performance.

Much emphasises need to be laid on the fact that satisfying customers is no longer enough to further long-term customer loyalty or bonding. Freight transport service firms in Ghana need to modify their philosophy regarding customer centricity by focusing on those customers who may switch instead of relying on attracting new customers to take the place of existing ones. Factors such as escalating competition, industry maturity, and strain caused by recessions experienced in the marketplace are just some of the reasons why new customers are simply more difficult to find (Comer, 1996). Reicheld (1996) offer a more practical proposal that indicate that customers who reallocate some of their purchases to other businesses, and customers who buy extra but whose purchases represent a less significant share of their total expenditure should be taken into account when dealing with customer defections. The current researchers maintain that apart from boasting of well trained, and motivated staff, it is important for freight transport service firms to ensure that all employees' satisfaction be considered and catered for if customer retention as marketing programme needs to be achieved.

In addition, result oriented switching barriers have to be deliberately created by freight transport service firms as a marketing strategy to make it difficult and costly for customers to switch to competitors' to choose their service offerings, since this has a core objective towards retaining the customers, especially the key accounts. Other studies have confirmed the positive effect of erecting switching barriers for the purposes of controlling customer retention (Bansal and Taylor, 2002; Jones et al., 2000; Lee et al, 2001; Ranaweera and Prabhu, 2003).

In specifics, it can be stated that when switching barriers are high in the industry, freight transport service firms will be more likely to retain even those customers who are less satisfied. Conversely, White, and Yanamandram (2004), contend that a firm with a high switching barriers and poor service quality is likely to generate negative attitudes, and damaging word of mouth communications.

RECOMMENDATION

It is recommended also that the freight transport service firms in Ghana can benchmark what is evidenced in many other service firms with inherent natural switching costs (e.g. it is a lot of work for customers to change their primary banking account, especially when many direct debits, credits, and other related banking services are tied to that account, plus many customers are reluctant to learn about the products and processes of a new provider - Lee, and Cunningham, 2001; Lam, Shankar, Erramilli, and Murthy, 2004; Bell, Auh, and Smalley, 2005). Practically, also, switching costs can be created by freight transport service firms in Ghana by introducing and implementing contractual penalties for switching, such as the transfer fees

levied by some brokerage firms for moving shares and bonds to another financial institution. However, White and Yanamandram (2004) caution that firms need to be cautious so that they are not perceived as holding their customers hostage.

The current reviewers also support the view of Anani (2013) which stress that relationship marketing, service quality, and service recovery constitute customer retention management strategies which if adopted by the freight transport firms can go a long way to improve their services rendered to the customers hence achieving customer retention.

RECOMMENDATION

There is need to convert this review paper to an empirical study by gathering data from respondents on the field hence coming out with findings that will be more capable of suggesting several promising directions for future research.

ACKNOWLEDGEMENT

The authors duly express their sincere thanks to all the various authors whose work have been cited in this review paper.

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Managing Lean Principles Applicability and Implementation in the Mining Industry in Ghana. A Review Paper on Related Literature.

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Abstract

Lean manufacturing or lean production, often simply "lean", is a systematic method for the elimination of waste ("Muda") within a manufacturing system. The concept lean also comprises waste created through overburden ("Muri") and the ones created through unevenness in work loads ("Mura"). This has led to this paper review on managing Lean Principles applicability and implementation in the mining industry in Ghana. This paper reviewed both theoretical and empirical literature on lean applicability in the mining industry in Ghana. The paper seeks to explore variables, which may be considered in lean applicability and implementation in the mining industry on: principles that are identified with the lean strategies application; assess the various tools that are adopted for lean implementation; determine how the lean management strategies are applied in the mining industry; explore the main benefits derived by the players in the mining industry for adopting lean strategies; and finally, identify the challenges that confront mining companies in their quest of adopting lean strategies. It is concluded that leanness as a management principle can successfully be applied to any sector of the economy. Base on such premise (postulation), it is worth noting that there is evidence of great advances regarding leanness as a management practice in the mining industry across the globe.

Keywords: Lean applicability, lean principles, lean tools, and mining industry, Ghana.

INTRODUCTION

In the past decade, studies have been conducted into lean principles, which are applicable to the mining sector (e.g. Castillo, Alarcón and Gonzalez, 2014). Experts are of the view that these studies effectively adopt specific lean tools (principles) at a basic level as well as comprehensively, showing that this methodology is provided in the mining industry (e.g. Dunstan, Lavin and Sanford, 2006; Hattingh and Keys, 2010; Klippel, Petter and Antunes, 2008a; Shukla and Trivedi, 2012; Wijaya, Kumar and Kumar, 2009; Yingling et al., 2000). The advancement of mining has become significant a step previous to mining exploitation that offers a key contribution in the industry, signifying an enormous percentage of total costs (Castillo et al, 2014).

Confronted with daunting challenges such as fluctuating demand, cyclical pricing and consistently experiencing reduction in the profitability within the mining sector, operating an effective and efficient business becomes crucial to any mining operation throughout the globe. That is, in spite of its inherent complexities and complications, firms in the mining sector have been incorporating lean principles into their own operations (Global Mining Magazine Apr 29, 2014), just to aim at deriving the potential benefits that come with it.

Extant studies have established the inherent differences that exist between the entire manufacturing sector and the mining industry. However, it needs to be noted that the variances are not precluding the application of leanness in the mining sector. Notably, it is held that lean principles' application cannot be attributed wholly to manufacturing industry (Dunstan et al., 2006). Notwithstanding, researchers maintain that there is a well-matched existence between the mining sector and lean, which in this case, management of any mining firm can derive benefits that comes with the application of concept such as application of value, value chain, flow, pull and perfection (Yingling et al., 2000).

The application of leanness in the mining sector, aside all other benefits, can directly lay emphases on waste application (Wijaya et al. 2009). MacDufile and Helper (1997), define waste as "anything that hinders the smooth flow of production in general. It needs to be stated that the positive examples that are linked with the use of lean principles in the mining industry, also have their attendant unique limitations, which present great challenges as well. In specifics, there are cultural aspects firmly embedded in the mining sector, which make the application of leanness as a management strategy hence facing difficulty (Freire and Alarcón, 2002).

It is reported that despite great benefits to be derived from the adoption of lean management strategies in performance improvement, other empirical studies' findings report on failures associated with the lean principles application to mean the inherent confusion regarding what and how to adopt tools in a specific environment (Tiwari, Turner and Sackett, 2007). Similarly, it is maintained that, incorrect application and implementation of lean principles can result in inefficiencies of a mining firm's resources which can also lead to reduced employee confidence in the adoption of lean strategies (Marvel and Standridge, 2009), hence increase in waste, costs and production time of mining companies. In addition, the incorrect selection of lean strategies, may likely cause disruptions in the very processes it meant to improve. Applying and ensuring sustenance in lean principles is said not to be easy task. Some managers in the mining industry struggle with the concept and several of them have experienced failure in their attempt to apply it in their business operations. Difficulties and obstacles associated with its application emanate from a teeming number of sources and only the determination of managers allows them to be overcome and reap the rewards of successful Lean implementations (Frickle, 2010). It is in this direction that the current authors believe that it is crucial to have in place systematic method necessary and capable for implementing appropriate lean strategies based on identifying wastes in production processes as evidenced in the mining sector.

The evidence is clear that, scores of opportunities are available for mining firms to derive benefit from the adoption of lean best practice, however, it is worth stating that implementation will always not yield immediate results. The key problem under discussion and the significant research questions that need to be answered using this paper review are: Giving these backgrounds, why should the mining industry in Ghana adopt lean principles into their business processes? How can the industry apply this effectively given all the attendant potential challenges that seek to confront its application?

There is a plethora of empirical studies conducted on lean management in different industries and environments around the globe. Bhasin (2011), identified specifically the meaning of the term, “a genuine Lean organisation” through the application of a comprehensive Lean audit focused at manufacturing firms in the UK and found out that Lean requires a considerable commitment and while successful implementation facilitates the improvement of numerous indices, the audit acquaints an organisation of the multifaceted requirements for Lean. Karim, and Arif-Uz-Zaman (2013), developed an effective methodology for implementing lean manufacturing strategies and a leanness evaluation metric using continuous performance measurement (CPM) in Australia. The findings indicated that continuous performance measurement matrices in terms of efficiency and effectiveness are proved to be appropriate methods for continuous evaluation of lean performance. Bhamu and Sangwan (2014), in India focused on the revision of LM literature and report these divergent definitions, scopes, objectives, and tools/techniques/methodologies. The authors found out that there are plethora of LM definitions with divergent objectives and scope. Theory verification through empirical and exploratory studies has been the focus of research in LM. Bateman, Hines and Davidson (2014), presented an in-depth study on the application of lean within the British Royal Air Force. The study found out that the five lean fundamental principles apply in Tornado but they need to consider specifically within the public service context particularly the pull principle. Singh, Jaiprakash and Mehta (2014), developed a statistically reliable and valid model of lean manufacturing (LM) implementation drivers for the Indian ceramic industry through an empirical study. The authors identified 12 drivers for the LM implementation in Indian ceramic industry. Lucato, Calarge, Loureiro Junior and Calado (2014), explored the implementation performance of lean principles in Brazil. The results obtained in the survey demonstrated that the performance of lean initiative implementation is not uniform among the companies located in the researched area. Outcomes also showed that the degree of implementation of the lean practices by multinational companies was higher than that for the national firms. Ljungblom (2014), researched on the practice of ethics in Swedish health care organizations using Lean Management. The findings indicated that ethics is not a consideration when hospitals are implementing Lean Management. Castillo et al. (2014), explored how to bridge the gap between the theoretical use of lean production and its practical, effective application in a Chilean mining project, and analyzed the impact of the implementation of lean construction/production methodologies in underground mining development projects. The main findings suggest that the incorporation of lean methodologies is an option, which companies should consider, given the current and future challenges in the mining business. Nadeau, Morency and Nsangou, Jr. (2015), did a contextualization of lean manufacturing in the mining sector in Canada with focus on foreseeable challenges to occupational health and safety, and summed up that recent applications of lean mining focus on the economic aspects of sustainable development.

It has become evidently clear from the foregoing discussions that the concept of lean strategies as evidence in organisations has increasing popularity due to its heavily documentation in the academic literature, and in addition to extant body of studies with findings published up to date, they all tend to focus on the American, Canadian, British, German and Swedish, Japanesse, South African markets such as the financial institutions, education, the fashion, sporting and other related fields. That is to say, unfortunately, today, there is evidence of distinct lack of empirical research conducted regarding lean applicability in the mining industry in Ghana (despite the fact that the country is been perceived as a potential market for mining products), and therefore experiencing a feedback loop for continuous performance. Hence, the justification of the current research topic. Also, in the present review, an attempt had been made by the researchers to identify the extent at which extant literature had attempted to

determine the degree of application of leanness in the mining industry by adopting comprehensive approaches to further the investigation on the issues regarding the developing of a structured methodology of implementing and applying suitable lean strategies in the mining industry in Ghana for the purposes of evaluating the continuous performance improvement.

The general objective of this current review paper would be to contribute to and extend to existing knowledge in the area of lean principles applicability in the mining industry. The review addresses the following specific objectives: (i). to identify principles that are associated with the lean strategies and their application in the mining industry; (ii). To assess the various tools that are adopted for the lean principles implementation; (iii). To determine the types of waste evidenced in the mining industry in Ghana; (IV). To explore the main benefits derived by the players in the mining industry for adopting lean strategies; and finally, (v). To identify the challenges that confront mining companies in their quest of adopting lean strategies.

LITERATURE REVIEW

This section presents a detailed literature review on principles that are identified with the lean strategies' application; assess the various tools that are adopted for the lean implementation; determine how the lean management strategies are applied in the mining industry; explore the main benefits derived by the players in the mining industry for adopting lean strategies; and finally, identify the challenges that confront mining companies in their quest of adopting lean strategies. The section continues with the discussion of the conceptual framework, and finally comes out with conclusions to the whole review paper. '

Theoretical Considerations

Definitions of Lean

Hopp and Spearman (2004), attempted to provide a definition for lean to encapsulate the production of goods or services that takes into account minimisation of buffering costs that are linked with activities such as excess lead times, inventories, or capacity. In existing studies (e.g. Rother and Shook,1999; Abdulmaleka and Rajgopal, 2007), lean production has been defined to include identification of all types of waste found in the value stream of supply chains and implementation of tools that are essential and crucial when it comes to eliminating waste for the purpose of minimising lead times.

Principles of Lean Management

Authorities like Womack, Jones and Ross (1990), and Womack and Jones (1996), identified three core principles as they are related to lean strategy application.

1. Identifying value;
2. Eliminating waste; and
3. The generating smooth flow

These principles have been expanded by the same authorities into five more principles (Womack and Jones, 2003):

1. Identifying customer defined value.
2. Optimisation of value stream.
3. Converting the flow of value smoothly through the control and elimination of wastes.
4. Activating demand pull through synchronising customer demand and flow of information.
5. Perfecting all processes regarding products and services.

1. **Identifying customer and specific value:** The foundation of this principle is purposely for identifying an exact value of the end customer in the form of specifying the most significant features of the market offering. This is because the customers of the organisation create value for it in terms of making their needs known, pricing, and timing for products or services (Karim and Arif-Uz-Zaman, 2013)." The complexity of this principle is that there might be slightly contradictory perceptions of value within different market segments.
2. **Identifying and mapping the value stream:** The Value Stream encompasses activities that span across every part of an organisation which involves the jointly delivery of products or services to the target customer. Value stream mapping also involves the tactical organisation of all end-to-end processes that affect the delivery of value to the target customer. With value stream mapping, all activities that are considered as non-value addition activities should be identified, modified removed from the entire process (Andi, Wijaya, Kumar and Kumar, 2009). The information gathered on the customer and value transformation are enough to create the value stream for the product demanded by the said customer (Karim and Arif-Uz-Zaman, 2013)."
3. **Create flow through waste elimination:** Create flow is considered as a value addition step that focuses on designing of processes and an establishment of capabilities that enable continuous movement throughout the process by dealing with interruption, detour or waiting through eliminating waste that is, for identifying product flow for production.
4. **Pull:** Pull means meeting consumer's rates of demand rather than the firm embarking on overproduction. It is suggested that no activity should be embarked on unless the outcome of it requires downstream operation. In other words, this is where the organisation's customers pull or demand products from producers through ordering for them.
5. **Pursue perfection:** This is considered as the final when it comes to integrating and perfecting the system so that the first four principles can be effectively and more efficiently implemented. These are the principles that seek to guide the elimination of non-value-adding elements (waste) as continuous improvement process, and the simplification of all manufacturing and support processes. It is a constant strive for improving the value specification, challenge the steps involve in value stream mapping and increase the speed connected with the flow that hidden waste can be identified and eliminated.

The five principles were later on increased by Liker (2004) to 14:

1. Base on the organisation's decisions for a long-term philosophy, even at the expense of short-term financial goals.
2. Creation of continuous process flow that is significant when it comes to bringing problems to the fore.
3. Usage of pull systems to deal with overproduction.
4. Levelling out the workload.
5. Building a culture for the organisation that has to do with putting a stop to fixing of problems but rather practising the philosophy of getting quality right first time.
6. Embarking on standardised tasks which provides a foundation for continuous improvement and empowerment for employees.
7. Usage of visual control to help detect hidden problems.
8. Usage of only dependable, thoroughly and carefully tested technology that stands to serve people in the organisation and processes put in place.

9. Organisations should grow leaders who will strive to understand all work activities, put the philosophy into practice and to teach others.
10. Developing extraordinary individuals, teams and groups who follow the philosophy of the company.
11. Managers should respect the extension of their organisation's network of stakeholders such as suppliers and partners by challenging them and helping them to improve.
12. Managers should adopt the strategy of "go and see for yourself" (i.e. an attempt of thoroughly understanding the situation at stake).
13. Decisions must be taken slowly through consensus, with all options exhausted.
14. Managers must endeavour to grow their organisations into a learning inclined one through persistent reflection and continuous improvement.

Ljungblom (2014), maintains strongly that regardless of whether a firm is using either the five or fourteen principles, Lean Management should be treated and seen as a philosophy, and not just a set of tools and methods or procedures (techniques) as asserted by earlier authorities (e.g. Ballé and Régnier, 2007; Hines, Holweg, and Rich, 2004; Waring and Bishop, 2010; Womack and Jones, 2003).

Types of Waste Evidenced In the Mining Industry

The starting point in applying the principle of lean is by understanding the value based on customer needs. In the mining industry, especially base metal, product and customer have unique characteristics (Andi et al., 2009). Products from the mining industry are standard product that inherently has well defined specifications and requirements. Quality and price are established by global market and there is no product differentiation between firms. Transaction occurs in stock market without direct contact between mining industry as a product provider and buyer. Thus "direct" customers (companies who buy the product) do not play a role that seemed so important in the mining business. However, in a broader view, mining industry has indirect customers who are passively or actively contribute in the role of business, they are stakeholder (society, government, media, etc). Their major interest is not on quality of the product but quality behind the product, such as environment, human well-being, and economic prosperity of society. These needs are the current value of mining sector and they have been articulated in the 2009 vision of International Council on Mining and Metals (ICMM); "respected mining and metals industry that is widely recognised as essential for society and as a key contributor to sustainable development" (ICCM, 2009).

Second step in lean thinking is defining waste and its counter measure. 7 + 1 waste in the mining industry is described as follows:

1. **Wait:** Muck-pile wash or dust removal waiting period blasting is a major cause of waste creation through waiting in mining. All activities have to be stop during this period. Engineering approaches to reduce waiting time, such as better exhaust fans or duct systems, need to be investigated. Another waste associated with waiting is idle time of mobile equipment, utilisation in underground mining is low. This low utilisation is due to trade off between utilisation of mining face, utilisation of work force and utilisation of mobile equipment, where attempt is to maximise the utilisation of mining face. Cost and benefit study should be conducted to determine the optimum utilisation.
2. **Over Production:** Unlike automotive industry where ability of market to absorb product is fluctuating, mining industry has advantage that market is stable and it can be said that market can always absorb in spite of volume of the product. Thus, over production is not an issue in the mining industry.

3. **Repair/rework:** In mining, risk involving work to repair or to rework is high due to possible and likely accident and cost related. Dynamic and unstable environment introduce constantly possibility for rework and repair that can not be avoided. However, imperfect work can be reduce by standardised procedure and method to assure the quality of work.
4. **Motion:** In mining, this type of waste is related on how the work is done. Currently, training for the new operator deals with mentoring system, which is done informally and non-structure. As a result, non standardised method is obtained, since variance of method between experience operators is present and trainee may perceive in the different way. Certification system is so far not applicable. Another trial for eliminating excess motion is by automation. As a requirement load is shifting from physical to cognitive, training should be designed to cover not only skill and rule based learning but also knowledge based.
5. **Processing (over):** Most visible form of over processing waste is the dimension of tunnel, it is common to observe that dimension of tunnel is exceeding required dimension. Causes are not solely due to the unstable rock but also due to over work in facing work. So far as scaling rock is a non standard work which is very much depending on the skill, knowledge and experience of the operator. An inexperienced operator may end up by keeping scaling of the rock, and never done, because the termination of the work is based on the subjective judgment of the operator.
6. **Inventory:** This type of waste is the most difficult to combat in mining. Very much higher cost of downtime compares to cost of inventory, make it a common believe that inventory is a positive. It is contrast to value of lean that inventory is root of evil. One way to tackle inventory problem is by improving reliability of equipment. It is a big challenge because majority of failure is random failure due to hostile environment. Design out Maintenance is one of the methods that can be utilised.
7. **Transportation:** In mining issues regarding this type of waste deals with choice of mode of transport, equipment sizing, pick up location, form of material to be transported.
8. **Human Talent:** This type of waste deal with under utilisation of human resource in terms of working hour and most important in terms of capacity and capability.

It is based on the belief that the human factor plays 70% when it comes to improvement potential as evidenced in the mining industry. It is advised that attention should be paid to this type of waste.

Lean Tools

In their quest of implementing leanness as a management principles in the mining sector, managers are required to note that, the principles and the tools are operating philosophy as they originated from the automotive industry, and that they are characterised with exact values, needs and features (Andi et al., 2009). The lean tools are highlighted below:

5S

In Japanese language, the original five 5S refers to Seiri, Seiton, Seiso, Seiketsu, and Shitsuke. In English, they mean to Sort, Set in order, Shine, Standardise and Sustain (Bicheno and Holweg, 2009).

Sort: All logistics or items found in the area where work activities go on are sorted orderly. First, the sorting is done to identify the needed activities and those that are not needed. The ones found not to be needed hence create waste need to to be discarded immediately. It is

advised that when managers are in doubt, they may decide to use red colour for tagging items. A tag with red colour always has a labelling comprising a date on it and the item is left unused till the date is discarded.

In sorting, the items are grouped according to their frequency of use. Periodically, managers must do sorting, possibly once a month, and should be a regular activity and not to be treated as a re-launch of the entire tool, 5S. Also, an organisation should avoid going to the top. A few personal logistics or items should be kept in the workplace (Bicheno and Holweg, 2009). The outcomes of sorting activity can be used for the purposes of visual communication to be taking before and after photographs and have them placed on 5S board for the entire workforce to appreciate and have a full glare of the improvements (Carreira, 2004).

Set in order: As a 5S tool, it explains how each item sorted can be found in the work area. In using set in order, it is advised that each item sorted must be shelved in places that will be visibly to each and every worker. There are two ways to make sure that all workers at the work area can see where each item is located, and these include colour matching of each of them with their area (labelling) and the usage of shadow boards. There is always repetition of this technique whenever there is change in any product, part, or tool (Bicheno and Holweg, 2009).

Shine: This explains that the work area must always be kept physically tidy and be done on regular basis. The workers should be tasked with the scanning of the work area for anything that is considered out of place and try to correct it immediately. A simple way of embarking on this task is taking five minutes to do repetitive clean-up exercise daily. Managers are advised to embark on these routine tasks through standardisation for the purposes of achieving best of results.

All equipment used for the cleaning and tidying up must be appropriately located and proper maintenance must be done. "Cleaning is checking" means that these are integrated. Workers need not just clean up the work area, they check for any abnormality and its root causes" (Bicheno and Holweg, 2009).

Standardise: It is advised that standards are to be developed when using the first 3Ss making sure that the entire workforce is doing what management requires of them. "Standard work aims at creating processes and procedures that are repeatable, reliable, and capable". A standard regarded as "best" is the one that is regarded by an entire workforce as also good and reliable that they would not want to do the procedure any other way (Bicheno and Holweg, 2009). Setting these standards require proper maintenance and improvement for the purpose of successful implementing of the 5S.

Sustain: All workers are advised to make the first four Ss a habit, and must therefore continuously endeavor to ensure their utilisation and improvement. Regular audits should be carried out to make the entire 5S as principles maintained and sustained.

Just-in-time (JIT)

Just-in-Time is a lean technique that lays emphasis on the continuous process when it comes to waste elimination and productivity improvement within the work area. Ohno (1988), perceived that for Just-in-time to work effectively, each business process of the firm should be giving right parts needed at the right time and in the right amount or quantity needed to produce an order from a customer to ensure the highest quality. Just-in-time as an important lean concept was adopted by TPS which allowed the automobile company to eliminate all forms of waste ranging from work-in-process inventory, flaws (defects), and poor delivery of

parts (Nahmias, 1997). Considered as a critical tool, JIT is used for the management of business activities which include distribution and purchasing, and are categorised into three: just-in-time production, just-in-time distribution and just-in-time purchasing. The main goal for JIT's usage is to "produce and transport just what is needed, just when it is needed, in just the amount needed, within the shortest possible lead time" (Drew, McCullum and Roggenhofer, 2004), and this can be related to the concept of having raw materials delivered, at the time needed and manufactured products also supplied at the time needed" (Lai, 2009).

Kaizen

Kaizen is considered as one of the most recognised words in the Japanese Language. In dividing the words into two parts, "Kai" means continuous and "zen" is translated as improvement. Kaizen hinges on the assumption that no business process can be seen as perfect hence more for improvement always. Hence, there must be "continuous improvement, in small increments, at all levels [of the company], forever". Kaizen is regarded as critical for the implementation of scores of lean techniques hence continuous improvement aftermath. Most of kaizen events address internal processes of a firm, and are also applicable in any part of the supply chain (Trent, 2008) process.

Kanban

"Kanban is considered as a classic signalling device (mechanism) for production pull systems" (Bicheno and Holweg, 2009). There are two types of kanbans; that is single and dual card kanban. The most popular one among the two which is used in lean management systems is the "single card" kanban. A single card kanban (also known as a pull signal) is used between pairs of work stations. A product kanban, considered as a kind of single card kanban, operates as whenever a product vis-à-vis a container is taken out, it is replaced with another. In the absence of a pull out that means authorisation has not been given and therefore production has put on hold (Bicheno and Holweg 2009).

It was the Toyota Company established the Dual card kanban to deal with the usage of two main kanban cards that is, the production kanban card (also known as supplier process) and the conveyance kanban card (also known as customer process). At this stage, supplier process is defined as the various processes a supplier goes through in an attempt to have parts replenished, while the customer process deals with all the processes that involves converting raw materials to finished products (in the form of assembly) (syque quality 2005). A Kanban is not tangible card. It can be designed in an electronic square plastic kanban card or a kanban container. A kanban square also known as kaban rectangle is always painted on the floor of the factory and it serves as a signal when it comes to replenishing an empty container.

Improvement Cycles

As lean management tool, improvement cycles provide the framework to ensure a continuous process for improvement. It needs to be stressed that having an approach which is standardised and is aimed at continuous improvement is always regarded as a great value for all firms. Improvement Cycles are divided into two variations namely; PDCA and IDEA

Plan Do Check Act (PDCA)

PDCA is recognised as extensively used improvement cycle around the globe. As a type of improvement cycle, PDCA requires the organisation to embark on massive planning. The planning aspect of adopting PDCA deals with creating a hypothesis with the end customers and putting their requirements in mind, hence the organisation customer focus. It is advised that the organisation must adopt continuous communication and dialogue in developing a

hypothesis that predicts an expected result. Bicheno and Holweg (2009) is of the view that a time plan needs to be developed.

After planning, the next activity comes doing. Doing in actual sense means implementation of improvement plan at this stage. The last activity refers to checking and as the name suggests, managers must check if the activity done was as predicted /or planned (Bicheno and Holweg, 2009). Once the checking activity is complete, the organisation can then put the results of checking into work. All the necessary changes or modifications are made giving way to the creation of standards. As the cycle begins once again, the end result standards are continuously improved upon. A large deviation gives an indication that something went wrong (Bicheno and Holweg, 2009) from the beginning.

Investigate Design Execute Adjust (IDEA)

Authorities on the adoption of lean tools regard IDEA similar to PDCA. It is used by the Toyota Company for innovation and design (Bicheno and Holweg, 2009) purposes. A company begins this cycle by investigating anything that calls for investigation such as an identified problem, customers' concern, data and the rest. After investigating, management presents the findings. New solutions are then implemented and subsequently giving adjustment to prepare for the next cycle and bring it close to the firm's requirements (Bicheno and Holweg, 2009).

Value Stream Mapping

As regarded as lean tool, managers adopt Value Stream Mapping to aim at visual improvement that deals with the creation of maps to show the "Current State, Future State, Ideal State, and Action Plan" of a company. It is advised that the entire process involving mapping must lead to an action otherwise it will be considered as not adding to value, hence waste. The core objective of adopting value stream mapping is make the identification of various non value added activities after which management puts processes in place to eliminate them.

Benefits Derived From the Implementation and Applicability of Lean as a Management Strategy

It has become a norm for most manufacturing firms to continually strive in their quests of increasing productivity and output regarding their operations for the main purposes of satisfying their customers (Tinoco, 2004), who are considered as the most important personalities to their businesses (Ofori-Okyere, 2014), by serving them right product, right quality, right quantity, and the right price in shortest possible of time.

An aspect of lean manufacturing is mainly for reviewing business operations for production operational components, processes or materials that add cost rather than value (Tapping, 2002). To achieve efficiency, it is advised that each step involving the process in manufacturing should be monitored as a way for determining if it adds value to the product or creates waste. If a non-value added element is detected, that part of the process could be outsourced to a subcontractor in order for the company to focus on the staff in achieving value-added operations in its core business.

Lean manufacturing is always adopted by value oriented firms for the purposes of identifying and eliminating wastes associated with processes of production. Companies are advised to use these results to help map their future state and to ensure successful implementation of lean in manufacturing processes (Tinoco, 2004).

The lean production implementation has greater and wider scope when it comes to enhancing productivity, customer satisfaction and achieving profits (Apleberger, Jonsson and Ahman,

2007) both short and long term. The goal of adopting lean management or in the mining sector seeks to the elimination of activities in the work area that are considered as non-value additions which include waiting, repair or rework, motion, over-processing, inventory, transportation (Dunstan et al., 2006), and that is, reducing costs (Wijaya, et al., 2009, Sanda, Johansson, and Johansson, 2011; Sanda, 2012; Liu, 2013) or extracting ore faster (Wei-Jian and Qian, 2010). Womack and Jones (2003), perceived lean management as aiming at a continuous improvement of an organisation's value creation capability by engaging all employees.

Adopting this philosophy throughout a firm is supposed to be positively correlated with higher efficiency (Dahlgaard and Dahlgaard-Park, 2006). Lean manufacturing is regarded as a strategy in business operations used in achieving the shortest possible cycle time when it comes to waste elimination (Liker, 1997).

Other benefits derived from adopting lean manufacturing usually promises of lower costs, higher quality, and shorter lead times (Liker, 1997). Lean as a manufacturing term is applied to achieve less human effort by the firms, less manufacturing space, less investment in tools, less inventory in progress, and less engineering hours to develop a new product in less time (Paranitharan, Begam, Abuthakeer and Subha, 2011), while giving customers what they demand in a highly economical manner.

The concept of Lean has been praised for empowering employees (Hasle, 2014), and it lays emphasizes on waste reduction and on maximising or fully utilising activities that contribute to adding value from the perspective of the customer (Ohno, 1988; Womack et al., 1990). In practice, the term waste specifically implies, any activity that absorbs resources and creates no value (Chauhan and Singh, 2012) to the organisation's operations. Leanness in manufacturing is considered a concept that seeks to unify the various practices involve in the promotion of lean as a management philosophy (Womack et al., 1990)

LM applicability provides manufacturers with competitive edge by achieving reduction in cost and improve productivity and quality. Many authorities have documented quantitative benefits derived from adopting lean implementation such as improving production lead time, processing time, cycle time, set up time, inventory, defects and scrap, and overall equipment effectiveness. On the qualitative benefits derived by companies for adopting LM, they are said to include improved employee morale, effective communication, job satisfaction, standardized housekeeping, team decision making, etc. (Bhamu and Sangwan, 2014).

Lean as a management concept is adopted for the purposes of optimising usage of resources available when there is the need to minimise waste (Anand and Kodali, 2009), and the creation of high quality goods and services at a lowest possible cost with maximum customer responsiveness (Kumar, Singh, Qadri, Kumar and Haleem, 2013). It is instructive and fair to posit that, initiatives that emanate from business improvement programmes involving the adoption of lean strategies which include minimised shutdowns, increased production and increased chances of reaching annual targets.

In general, lean manufacturing philosophy requires respect from management towards the people(the workers), aims at continuous improvement, a long-term view, a level of patience, a focus on process and ability to understand where the individual is in his or her development (Ahmad, 2013). Lastly, under the lean concept, all non-value adding activities are regarded as waste generators that divert resources from the value adding activities of the organisation.

Challenges Associated With the Adoption of Lean Management or Lean Manufacturing

Despite the potential benefits derived from the application of leanness as a management principle in business processes of mining firms, the challenges bedeviling its adoption deserve serious consideration. Some theorists both in the academia and industry have shown a greater interest regarding potential challenges associated with the adoption of lean strategies as managerial tool. The success of any particular strategy in management is always said to be dependent upon organisational characteristics, which implies that all firms cannot implement or apply a similar set of strategies in their particular case (Shah and Ward, 2003).

Lean principles are not just adapting the tool but how to change the culture, 'a true culture of continuous improvement'. In contrast to innovation approach which emphasize on a quick improvement/change, lean principle is a continuous improvement approach which emphasize on a small but constantly improves. In implementing lean thinking in the mining sector, managers should understand that leanness in manufacturing is an operating philosophy in its original context (automotive industry) that had particular values, needs and characteristics. Mining operations are characterized as dynamic, uncertain, volatile and risky work environment.

The application of unsuitable lean technique for a given situation can sometimes lead to increase in waste, cost and production time in a manufacturing company like mining. Due to inappropriate implementation of lean strategies, there may be changes that are likely to create disruptions in the process it is meant to improve continuously. It is in this wise that the application of lean concept in the mining firms becomes crucial and critical for managers to have in place systematic method capable of implementing appropriately a strategy based on the identification of wastes as evidence in manufacturing processes.

In the main, it can be stressed that there are important barriers in other words known as challenges confronting organizations in their quests of implementing lean strategies. Some of these challenges are: culture of the organisation, poor flexibility, employees resisting change and innovation, etc. (Achanga, Shehab, Roy, and Nelder, 2005; Nordin, Deros and Wahab, 2010; Zhou, 2012), high workforce turnover (Andi et al., 2009), which is advised that much effort should be emphasized on training for new workers recruited by the mining company. The applicability of lean philosophy in the mining sector seemed complicated, given the issue of uncertainties and variability characterising activities in mining (Nadeau et al., 2015).

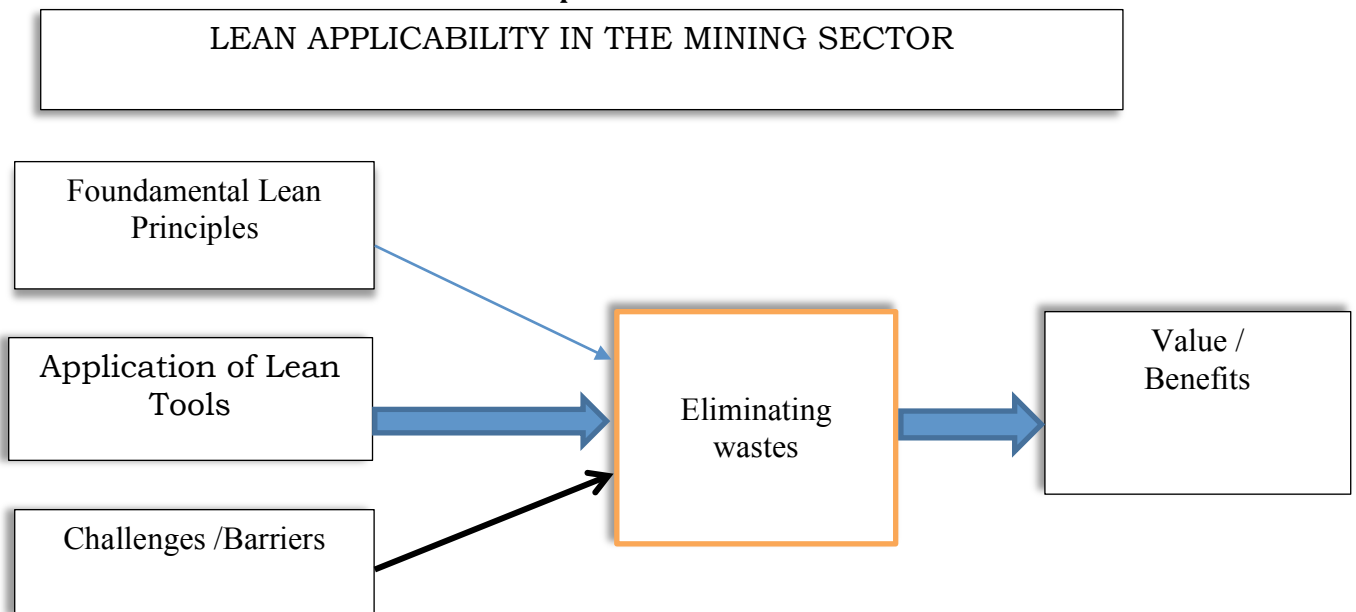
In addition to the challenges, specific mention can be made to lack of clear customer focus (Hines et al., 2004; Radnor and Walley, 2008; Radnor et al., 2012), that is, in the context of mining industry it is challenging for the term customer to be clearly defined within the operational context of the mining firms. The mining industry like any other industry is sometimes saddled with too many procedures and targets considered major barrier (Radnor and Walley, 2008; Waring and Bishop, 2010). There is clear evidence of lack of understanding regarding the lean system thinking and process flow (Ballé and Régnier, 2007; Dahlgaard et al., 2011; Emiliani, 1998; Radnor and Walley, 2008; Radnor et al., 2012; Waring and Bishop, 2010), on the part of managers of lean thinking and their subordinates.

There is also lack of awareness regarding strategic direction (Hines et al., 2004; Radnor and Walley, 2008; Waring and Bishop, 2010) for the organisation's quests of applying lean philosophy. Another barrier confronting the implementation and applicability of Lean in the mining industry is the firm's inability to reconstruct the massive impact of historical top-down change approaches into Lean's bottom-up improvement methodology (Emiliani, 1998; Hayward, 2012) or to find a combination of the two (Anhede and Lord, 2009).

The implementation and applicability of the Lean concept in the mining industry requires development of leaders who can function effectively as motivators, coaches and be able to grow and develop persons and teams (Anhede and Lord, 2009; Poksinska et al., 2013) as in transformational leadership (Ljungblom, 2012; Poksinska et al., 2013), a distinct and high quality of leadership is necessary to get through the change (Joosten et al., 2009; Kimsey, 2010; Poksinska et al., 2013; Waring and Bishop, 2010). Studies reveal how Lean managers has changed the focus of managerial work – from managing operations to managing people (Poksinska et al., 2013).

Managers must always endeavour to understand the process involving the applicability and implementation of lean and the needed respect giving to the people along the way (Kimsey, 2010). Nonetheless, managers who regard Lean as more than a set of tools and techniques makes it a barrier in terms of its understanding. Also, attempting to develop a culture that initiates the involvement of everyone in the organisation is critical to the implementation and applicability of the Lean philosophy – the daunting task is everyone needs to be trained (Ballé and Régnier, 2007; Dahlggaard et al., 2011; Emiliani, 1998; Hines et al., 2004; Radnor Walley, 2008; Radnor et al., 2012; Waring and Bishop, 2010; Womack and Jones, 2003). All these barriers need to be mitigated for lean manufacturing successful adoption and diffusion in the mining sector. Identifying accurate drivers is capable of helping in taking effective lean decisions during lean implementation planning process.

Conceptual Framework



Based on the theories from (Womack et al. 1990; Womack and Jones, 1996; Womack and Jones, 2003; Bicheno & Holweg, 2009).

Figure 1, above presents a detailed illustration regarding conceptual framework of this related literature review. Improper and ineffective application or implementation of lean strategies can lead to inefficiencies in a mining firm’s resources hence increasing waste in diverse forms, cost and production time. However, it can be hold as a firm truth that proper applicability of the lean strategies (involving the principles), and effective selection of right lean tools are significant in eliminating all forms of wastes that occasioned in business operations of any organization hence achieving value by the organization and to providing value that is associated with the products and services offered to stakeholder groups. The existence of wastes in organisations bring to the fore visible challenges that contribute to confront

manufacturing organisations in their quests of applying or implementing lean strategies. So it can be maintained that total elimination of wastes as evidenced in an organisation's business operations is a proof that the management have been able to deal with challenges that confront them in their quests of successfully applying Lean strategies.

CONCLUSION

It has been postulated that leanness as management principle can successfully be applied to any sector of the economy. Base on such proposition or premise (postulation), it is worthy of mention that there is evidence of great advances regarding leanness as a management practice in the mining industry around the globe. Panoply of empirical studies have reported the significant role played by applicability of lean thinking in the business operations of the mining companies (e.g. Karlsson and Ahlstrom, 1996; Humphreys, 2001; Collard, Noort, and Seal, 2007; Klippel, Petter, and Antunes Jr., 2008a; Andi et al., 2009; Castillo et al., 2014; Nadeau et al., 2015). For the purpose of this literature search, it has been established that during lean implementation, emphasises should be laid on customer value. Also, equally important and worth noting is that (Bicheno & Holweg, 2009), Leannes in the mining sector is "behaviour-driven"; that is managers ensuring its implementation and sustenance must be abreast with its continuous process and should be driven at making it so. In order to expand the understanding of lean applicability or implementation in the mining industry; this literature search has developed a lean applicability framework and has evaluated the impact of it in mining exploitation projects undertaken by the players in the industry. Adapting lean management philosophy in the mining sector is just a beginning. Although the concept promises gains in productivity, its implementation in the mining sector is complicated, given the uncertainties and variability characterising mining activities.

ACKNOWLEDGEMENT

The current researchers duly acknowledge and extend their sincere gratitude to all the scores of authorities whose existing works were obtained and cited in this work of review.

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An investigation on the role of Visual Merchandising Displays in the promotion of traditional fabrics. An evidence from retailing the Asante Kente fabrics in Ghana.

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Abstract

The fierce competition and the similarity of competing merchandise characterised modern fashion industry impel fabrics retailers to utilise various visual merchandising displays (VMDs) to improve the desirability of their products and to achieve differentiation of their offerings from competition. This has led to this study investigating on the role played by the various VMDs in the promotion of Asante Kente fabrics. Reviewed literature comprised: the Kente apparel, various VMDs adopted by retailers to promote products, and benefits derived by apparel retailers from adopting VMDs. An explorative research and qualitative data were gathered by means of projected images and focus groups discussions and direct observations. The data were analysed by means of thematic analysis. Findings indicated that respondents have knowledge on certain VMDs both exterior and in-store, whereas, other VMDs were considered not appropriate in their line of business. This is to say that all the respondents contacted on the field agreed to certain positions established by extant theories regarding the adoption of VMDs and the role they play in promoting apparels in retail shops

Key Words: Kente fabrics and apparels, Visual Merchandising Displays, Ghana.

INTRODUCTION

Kente cloth, known as nwentoma in the Akan language, is a type of silk and cotton fabric made of interwoven cloth strips. 'Kente' is a derivative from the Akan word for basket, kenten or kenten (Kwekudee, 2012) and is native to the Akan ethnic group of Southern Ghana. Specifically, Asante "KENTE", a brilliantly colourful fabric, is entirely hand-woven in the Ashanti Kingdom, in the Kwabre areas of the Ashanti Region (e.g. Bonwire, Adanwomase, Sakora Wonoo, and Ntonso). It is usually identified by its dazzling, multi-coloured patterns of bright colours, geometric shapes and bold designs (Ofori-Ansa, 2009). Fashion greats and traditional textile publicists maintain that the brilliant colours and intricate designs always associated with Kente have unquestionably made this fabric the best known of all Ghanaian, and perhaps even all West African textiles because it is woven in large quantities, exported to more places, and incorporated into greater variety of forms than any other African fabric. Traditional apparel theorists (e.g. Asamoah –Yaw, 1992) stress that the Asante Kente represents the creative, thoughtful or designer's woven cloth'. What makes it more beautiful and most preferred form of traditional apparel is that every design incorporated in Asante

Kente has a story with a philosophical meaning, giving each cloth its own distinction. Avins and Quick (1998) add that the Kente apparel has also captured the attention of visitors since at least 1817 hence making it a traditional fabric synonymous with exquisite attributes such as splendor and ostentation, extravagant price and incredible size and weight.

Functionally, the cloth is woven according to gender. A woman's Kente is worn in three pieces, one piece is wrapped around the lower body in a tubular form as long skirt and held down at the waist with a scarf. Alternatively, the piece of cloth for the women is sewn into an ankle length skirt held at the waist with string of cloth or elastic band. The second piece is also sewn into fashionable Kaba (blouse). Both male and female Kente may bear similar features such as motifs, arrangement and colours yet they have distinct characteristics (Badoe, 2005). Conversely, the male's Kente cloth is worn by draping it loosely around the body from the shoulders down with the ends held over the left shoulder (NB: over the right shoulder is culturally inappropriate) in the manner of the Roman toga (Bowdich, 1966 as cited in Badoe, 2005). In Ghana, its usage cannot be over stated. The colourful Kente cloth is worn by guests in all functions and ceremonies (e.g. state functions-independence day ceremonies, oath swearing of public officers, graduation and matriculation ceremonies of students, Church services, weddings and engagements, beauty contests, etc.). In recent times, fashion stylists in their quests of popularising the apparel and making it affordable to all have produced scores of assorted ornaments from Kente (e.g. shirts, shorts, hats, luggage or carrier bags, graduation stoles, mufflers, flying ties, bangles, headgears, Kente casuals, etc.).

This study proceeds from a consumer response-centred approach to investigate visual merchandising displays (VMDs) used by retailers to promote the Kente cloth. Modern retail fashion business is characterised with fierce competition and the similarity of merchandise impel players in the fashion industry to utilise various visual merchandising displays (VMDs) to improve the desirability of products. Findings in retail market research indicate that retailers across the globe face a challenge when it comes creating competitive advantages and to achieve differentiation for their brands (Shu-Luan, n.d.). In the specific case of apparel retailers, their major tasks transcend beyond improving quality of their products, to adopting a strategy of shaping a well-designed store atmospherics for the purposes of attracting patrons to their business space.

Specifically, retailers like the ones found in the apparel industry strategically design their shops to attract buyers into their shops, assisting them to select the products they need and to inspire them to make planned, unplanned and spontaneous purchases and ultimately provide them with an enjoyable shopping experience (Levi and Weitz, 2009). The type of environmental stimuli the VMDs adopted by apparel retailers create could have an effect on consumers' perceptions, that is "... a practice where a visitor to the shop observes, selects, organises and reacts to environmental stimuli in a significant way..." (Du Plessis and Rousseau, 2003). Thus it is held that successful VMDs create favourable effect on consumers' emotion; hence they sometimes purchase products unconsciously depending on their current mood (Hefer and Cant, 2013).

In practice, it can be maintained that retailers sometimes have at their disposal the "usual" elements of brand identity: name, symbol, packaging, and advertising. Extant literature explain that retailers can additionally draw on those dimensions that have been identified in studies of store image (Davies and Ward, 2002 – drawing on the work of, for example, Bloemer and de Ruyter, 1998; Grewal, Krishnan, Baker & Borin, 1998; Lindquist, 1974; Martineau, 1958; Porter and Claycomb, 1997). Merchandise (assortment; quality; brand mix; and price); store (location; environment - internal and external; atmosphere; and name/fascia); Service (personnel; and

levels and quality) and Promotion (advertising/public relations; and in-store). These elements mean “design” are brought to the fore and, in particular, it is visual design that is emphasised (Kent, 2003). The significance of the visual is also reflected in the attention always paid to the physicality of retail provision and can be seen in the extensive literatures that have developed around particular issues, for example, of “retail location”; “retail atmosphere”; “servicescape” and “merchandise selection and display”.

Despite the various roles played in the apparel retail industry, VMDs as strategic promotional tool is referred to as a neglected field in fashion marketing research (Buttle,1988), which this ‘neglect’ of the retail front is considered as the face of Kente apparel brands promoted by retailers in Ghana. Sharing similar opinion, Lea-Greenwood (1998) stresses that as a promotional strategy adopted by retailers in the apparel industry, VMDs have not received much attention in the academic literature. Bastow-Shoop et al., (1991) posit that as a promotional strategy, VMDs is rated as second only to effective customer relations by retailers. The current authors perceive that this neglect though not regarded as total, does not suggest that this area of fashion is unworthy of academic research. Kim (2003) argues that it may indicate that since VMDs comprise perceptions and aspects of creativity, it is perceived as an area difficult to test, researchers may be challenged when it comes to presenting meaningful analyses for it. A notable exception has been within the Ghana’s fashion based literature, where a limited number of texts have been devoted to the subject. These though are primarily practitioner-based, highlighting again a deficiency of attention from retail academics.

It is the light of the above mentioned developments that the current researchers used this study to represent a small step towards addressing this lack. It investigates the role played by VMDs in the promotion of Asante Kente apparels in Ghana. The study sought to answer the following research questions: (1). How can VMDs adopted by Kente fabric retailers to promote their products be determined? (2). what benefits do Kente apparel retailers derive from adopting VM as their promotional strategies in Ghana?

LITERATURE

What is Visual Merchandising (VM)?

VM has over the years received diverse definitions from different authorities with many agreeing on the basic key terms like display, presentation of products to customers. Ebster and Garaus (2011) see visual merchandising as “the art and science of presenting products in the most visually appealing way”, emphasizing on the communication with the customers through images and presentations. Diamond and Diamond (2003) also define VM as the presentation of a store and its merchandise in ways that aim to attract the attention of potential customers and motivate them to make purchases.

These definitions have been extended by Bastow-Shoop, Zetocha, and Passewitz (1991) who maintain that VMDs is everything the customer sees, both exterior and interior, that creates a positive image of a business and results in attention, interest, desire and action on the part of the customer. Visual merchandising is therefore concerned with both how the product and/ or brand are visually communicated to the customer and also whether this message is decoded “appropriately” (Wanninayake and Randiwela, 2007). Though Wanninayake and Randiwela has contributed towards the definition of the concept VMDs but they focused on the visuals aspects of the concept by overlooking the role other sensory organs like hearing, smelling, etc. play in presenting the merchandise to the customer. Judging from the above definitions, the current researchers also see VM as the physical presentation of products and services and the design of a place of business for the purpose of increasing sales. This is because an effective

and more efficient VMDs is often referred to as the silent salesperson communicating to the customers with its purpose of attracting them to the merchandise for closer examination that leads to sales.

Visual Merchandising Displays/ Elements

The design of a retail environment is related to the store atmosphere creation (Law, Wong, and Yip, 2012). Kotler (1974) defined store atmosphere as the quality of the surrounding space. It is an important issue for inducing the desired affective response of consumers and aims to enhance purchase probability. In today's keen competitive environment store image and atmosphere are recognized by retailers as important factors influencing customers' decision making processes (Hartman and Spiro, 1995). More specifically, atmospherics is an effort to design buying environment to produce specific emotional effects in the buyer that enhance his purchase probability (Kotler, 1973). These atmospherics also called "good" interior design within a store can maintain customer interest, encourage customers to lower their psychological defenses and make a purchase by (Walters and White, 1987; Bitner, 1992; Omar 1990 and Davies and Ward, 2002). The impact of a pleasant store atmosphere is also positively related to customer satisfaction (Spies, Hesse, and Loesch, 1997). Atmospheric stimuli which please the actual and emotional needs of consumers enhance the degree of consumer participation in a store, leading to favourable purchasing behaviours (Wright, Newman, and Dennis, 2006).

Mills, Paul, and Moorman (1995) suggest that "visual merchandising ranges from windows/exterior displays to interior displays including form displays and floor merchandising along with promotion signage. "The presentation of a store/brand and its merchandise to the customer is made possible through the teamwork of the store's advertising, display, special events, fashion coordination, and merchandising departments in order to sell the goods and services offered by the store/company.

Farese, Kimbel, and Woloszyk, 2003) further divided the elements of VMDs into four to comprise of storefront (signs, marquee, entrances and window displays), store layout, store interior (fixtures), and Store display. On the view of Law, et al. (2012), the work of Farese et al was summed to include store exterior and interior as the two major areas covered in Visual Merchandising with a variety of components (colour combination, product placement, lighting arrangement, layout and highlight design, mannequin and props selection, fixtures and fittings selection) are involved in creating a favourable shopping atmosphere.

Babin, Hardesty, and Suter, (2003), following suit found that the combination of colours and lighting plays a critical role in influencing the purchase intention of consumers and store patronage. Intangible store elements, such as sprayed fragrance, can stimulate one's affective state and help boost mental imagination (Fiore, Yah, and Yoh, 2000). Chebat, Chebat, and Vaillant (2001) found that appropriate music can affect the cognitive activity of consumers. A positive imagery also helps in associating a better cognitive experience between consumers and products, and intensifying purchase intentions (Mandler, 1982; Macinnis and Price, 1987; Meyers-Levy and Tybout, 1989).

They are known as visual merchandising practices to comprise of focused merchandising, intelligent store design and layout, product displays, packaging, and signage. This because retailers can use it to help customers find the right products (Baker, Grewal, and Levy, 1992). (Mills, ET al.1995). It comprises of window/exterior displays to interior displays including form displays and floor/wall merchandising as well as promotion signage Kotler (1974) explained store atmosphere as the quality of the surrounding space. It is an important issue for inducing the desired affective response of consumers and aims to enhance purchase

probability. Based on Kolter's thought, Donovan and Rossiter (1982) extended the concept with physical in-store variables (layout, architecture etc.) and the influence of social factors (type and behaviour of people). A number of the internal store aspects identified above, e.g. merchandise, atmosphere and in-store promotion, are reminiscent of Omar's (1999) classification of interior display types: merchandise, point-of-sale and architectural.

Benefits to be derived by retailers from adopting VM as their promotional tool

In recent years, there has been a growing recognition that store interiors and exteriors can be designed to create specific feelings in shoppers that can have an important cuing or reinforcing effect on purchase (Kotler, 1973-1974). Atmospheric stimuli which please the actual and emotional needs of consumers enhance the degree of consumer participation in a store, leading to favourable purchasing behaviours (Wright et al., 2006). The presentation of a firm and its merchandise and attract potential customers and facilitate purchasing (Diamond and Diamond, 2003). Stores with attractive displays or attractive de'cor might reduce psychosocial risk related to purchasing (Mitchell, 2001). The impact of a pleasant store atmosphere is also positively related to customer satisfaction (Spies et al., 1997). Wright et al.,(2006) also considers the atmospheric stimuli of VMDs as able to pleasing the actual and emotional needs of consumers enhance the degree of consumer participation in a store, leading to favourable purchasing behaviours.

As tactics it is used by retailers to attract customers to the stores. It will stimulate them to choose the most liked store, spend more time in it, and examine the products and eventually resulting in a purchase (Gajanayake, Gajanayake, and Surangi, 2011). Visual merchandising is used to create a positive shopping experience – and that makes customers want to return (Farese ET al.2003). Besides, visual merchandising is also a powerful marketing tool as an external motivator in the consumer's impulse buying behaviour. Indeed, impulse buying is significant for sales revenue; in fact it represents a substantial volume of goods sold every year (Bellenger, Robertson, and Hirschman, 1978; Clover, 1950; Cobb and Hoyer, 1986; Kollat and Willet, 1967). Visual merchandising enhances the attractiveness of a store and its perceived image from the viewpoint of customers. A positive mood serves as a contextual cue for evaluating the perceived quality, image of a product and store, and purchase intention (Bakamitsos, 2000). The impact of a pleasant store atmosphere is also positively related to customer satisfaction (Spies et al., 1997). Atmospheric stimuli which please the actual and emotional needs of consumers enhance the degree of consumer participation in a store, leading to favourable purchasing behaviours (Wright et al., 2006).

METHOD

The study adopted exploratory design to scrutinise insights into general nature of the research problem as has been indicated by Tustin, Lighthelp and Martins (2005). This was to find out the extent to which the respondents agree or disagree regarding the fact that various VMDs play a key role in the promotion (retailing) of the Asante Kente in Ghana. Due to the exploratory nature of the study, non-probability sampling method was used to get the samples grouped in a process that does not give all the individuals in the population an equal chance of being selected (Tustin et al, 2005). In this case, subjects were selected on the basis of their accessibility and through purposive approach the purpose (personal judgment) of all the researchers (Zikmund and Babin, 2010)

On the field, it was observed that all the weavers or producers/ retailers have formed associations. Example in Adawomase Township, Adawomase Kente Weavers Association (AKWA) and Adawomase Royal Kente Weavers Association (ARKWSA) exist as Kente

producers/retailers association. So members and leadership of such associations assisted the researchers (in the form of snowballing / referral services) when they needed to purposively sample participants for the FGDs. As a traditional occupation, the Kente trade comprise individuals who perform varied roles before the finished product gets into the hands of the final consumer. One person can be seen as a designer (in-charge of motifs, arrangement and the choice of colours), a weaver, a producer and the same time a retailer. The researchers' request to undertake this study involved seeking to negotiate access to a range of participants based on the purposive and convenient sampling of designers, weavers, producers / retailers. In order to select such a sample the researchers required access to the list of members for all the Kente associations located in each of the towns. This request made by the researchers determined precisely how they required the sample to be selected.

Hence, the criteria used to purposively sampling of participants to participate in this study included:

- Kente apparel producers / retailers who have their business located in Bonwire, (in the Ejisu Juaben District), Adawomase, Sakora Wonoo, and Ntonso townships (also all in the Kwabre East District).
- End users of Kente apparel who buy the products from the retailers in Bonwire, Adawomase, Sakora Wonoo, and Ntonso townships.
- Individuals with the time and the willingness to participate in the study particularly in the Focus Groups (Discussions and interviews).
- Both retailers and an end user with prior knowledge on the adoption of VMDs in the retailing of apparels.

Data was collected by the use of FGDs, which according to Zikmund and Babin (2010) are considered as unstructured, free flowing interview with a small group of people, usually between six and ten participants. This was supported with illustrations, which were open-ended questions that asked participants questions relating to the topic under study (Hodder, 1994), which in this case referred to the various VMDs adopted by the Kente fabric retailers in Bonwire, Adawomase, Sakora Wonoo, and Ntonso townships in the promotion of the product. These satellite towns were selected for this study, because it is believed that they constitute the towns in the Ashanti Kingdom, precisely in the Ejisu Juaben District and Kwabre East District where the Kente cloth (apparel) is predominantly noted for its hand-woven nature hence the promotion of the Kente trade by the people. In all, forty (40) participants (ten participants in each focus group) were used to collect data. That is, ten (10) participants selected from each town were contacted and invited to participate in the study which they all expressed willingness and acceptance to participate after researchers explained the essence of the study to them. All these respondents were selected because they remain the right individuals with the right responses to provide to carry out this study (Holme and Solvang, 1997).

In each town, two forms of data were compared with one another to gain the most preferred data possible from each participant. The focus groups were based on the adoption of the VMDs adopted by the Kente retailers to promote the products to their customers. Photographs of apparel retail shops were projected to the participants in the focus groups. With the researchers acting as the moderators, series of questions derived from the research objectives were posed to the participants. The structure of the questions for the focus groups were as follows:

1. What VMDs are adopted by retailers to promote their Kente fabrics?
2. What benefits do Kente fabric retailers found in this town derive from adopting VMDs as their promotional strategies?

All discussions and interviews were put on tape and lasted for two hours. The interview content was transcribed from the Akan language (Asante Twi) to English. The first two interviews were adopted as a blueprint to establish the codes, concepts and inter-relationships for open coding. The third focus group interview found that participants with prior knowledge in VMDs tend to accept the subject under discussion. Thus, attention was paid to participants with or without a strong knowledge sense in VMDs.

Thematic analysis was used to analyse data for this study due to the contextual nature. Tesch, (1990) explain thematic analysis as an activity in qualitative research which involves a thorough search through qualitative data to identify any recurring patterns. For the purpose of this study, these patterns were then sorted into themes and categories. It is thus a process that provides organisation and description of qualitative data in detail (Braun and Clarke, 2006).

RESULTS

At this stage, the conclusion of the questions posed to participants during the FGDs were examined in two main themes and their underlying categories as outlined by Tesch's 1990 model (thematic analysis).

Theme 1: VMDs adopted by Kente apparel retailers to promote their products.

Samples of the various VMDs were projected to the participants. The purpose for the projections was to find out the extent to which participants were aware about the existence of each display element and the roles they play in the promotion of Kente products by the retailers.

Two categories emerged from this theme.

First category: The participants displayed their knowledge about what constitute interior display.

Participants have knowledge on certain interior VMDs which included colours and lighting, sprayed fragrance, intelligent store designs and layouts, product displays, packaging, and signage. The following quotation were taken from the FGDs:

- I have heard of sprayed fragrance.
- I have come across different lightings been used by stores in the big cities and movies.
- I have seen different types of product displays in shops in the big cities.

Secondary category: Participants agreed to the fact that they have knowledge on exterior displays.

The exterior displays participants expressed knowledge on include store windows, signage, marquees and awnings. The following quotations were taken from the discussions that ensued between them and the moderators.

Store windows are used for sales promotions, image-building, seasonal changes, new arrivals and high demand items.

A fresh and exciting face can be constantly presented using a store window. Signage provides information on product related features/ benefits/prices.

It needs to be noted however, that factors such as space, availability of VMDs and cost to be incurred to obtain them from the market always deter retailers from accessing them.

Theme 2: Benefits of VMDs to Kente fabric retailers in Ghana

After the moderators of the FGDs projecting various images on VMDs to participants, varied assertions were made concerning the benefits retailers would derive from adopting VMDs in their stores.

.....due to the competitive nature of the Kente fabric business found in the four towns, attention of retailers should be paid to well-designed store interiors and exteriors for the purposes of creating specific feelings in shoppers that can have an important cuing or reinforcing effect on purchase.

The following three categories emerged from the theme:

First Category: The participants agreed that the VMDs are capable of attracting customers to a Kente fabric store.

The FGDs found that the strategic VMDs in an apparel store attract potential customers and facilitate purchasing.

However, there are other factors like branding in the form of recognised store name, symbol, packaging, and advertising, attractive de'cor, quality products, pricing, promotion, location, customer service or support that also affect the final decision to be taken by customer.

Pleasant store atmosphere is capable of impacting positively on the satisfaction of Kente apparel shoppers. This illustrates practically that VMDs influence buying behaviours of Kente shoppers. Quotations that were taken from the data to exemplify findings include:

- Good displays attracts me to a store.
- I can do impulse buying based on good VMDs in a store.
- Dramatic and experiential displays can lead me buy the fabric finally.

Second Category: VMDs create a positive shopping experience

The participants during the FGDs agreed that VMDs provide positive shopping experience for Kente fabric shoppers. However, store owners or retailers have roles to play to ensure a conducive shopping environment that provide such experience. These quotations validate this category:

- I think it can inspire me, get attracted to most liked Kente store.
- I can spend some times in it for a while.
- I can examine different kinds of Kente fabric before making a final purchase.

Third Category: VMDs produce specific emotional effects and create positive mood that serves as a contextual cue for evaluating the perceived quality of the apparel

Although VMDs are capable of attracting customers to a Kente fabric store, and provide positive shopping experiences for the shoppers, retailers should take into consideration the positive mood a good shopping atmosphere provides since it helps in evaluating the perceived

quality of the apparels, the image (both products and store), and purchase intentions. The following quotations were taken from the FGDs to validate this category:

- A pleasant store atmosphere gives me psychological satisfaction.
- Good VMDs enhance the degree of my participation in a store.
- To say wow and pay for it depends on good VMDs visible.

DISCUSSIONS AND CONCLUSIONS

VDMs adopted by retailers in the promotion of the Kente fabric

Through discussions and interviews making up of the FGDs, it was revealed that the participants had knowledge on few VMDs which include: Their knowledge on exterior presentation include signage, banners, marquees, and awnings. Direct observation revealed non-adoption of awnings, window displays as exterior VMDs for all the Kente shops located in all the four towns visited.

In-store visual merchandising displays adopted by the retailers included shelves, music, fixtures and fittings selection, products display. This is said to be congruent with the positions of authorities (e.g. Baker, Grewal, and Levy, 1992; Farese, Kimbel, and Woloszyk, 2003) as established in literature. The following VMDs were found not to be adopted by retailers in their quests of promoting the Kente fabric: Store's advertising, packaging, lighting arrangement, sprayed fragrance, visual effects, special events, in-store promotion, point-of-sale, and in-store promotion signage, and store layout. This is to say that responses from the field were incongruent with the positions of extant theories (e.g. Fiore et al., 2000; Law, et al., 2012). Respondents explained further that the Kente fabric is enjoying automatic promotion in the marketplace due to its nature of being considered as a fabric of royalty and regalia

Benefits derived by retailers in visually merchandising the Kente apparel

During the FGDs, it was revealed that effective VMDs attract customers to visit the stores, provides positive shopping experiences and can lead to impulse buying. VMDs can stimulate customers, get them attracted to most liked Kente store by spending some times in there for a while by examining different kinds of Kente fabric before making a final purchase. A pleasant in-store atmospherics provide shoppers psychological satisfaction and enhance the degree of their participation in the stores. These responses from the field are said to be agreeing with the positions of existing theories (e.g Bellenger, Robertson, and Hirschman, 1978; Clover, 1950; Cobb and Hoyer, 1986; Kollat and Willet, 1967; Farese et al., 2003; Wright et al., 2006; Gajanayake, Gajanayake, and Surangi, 2011). These are a reflection on the key role played by the adoption of VMDs in the promotion of the Kente fabric in the Ashanti Kingdom.

The study concludes that Kente apparel retailers found in both Ejisu Juaben and the Kwabre Districts have knowledge on and adopt few VMDs in their business with majority of them considered as not appropriate in their line of business. They also agreed that they derive benefits for adopting VMDs in the promotion of their products. This is to say that all the respondents contacted on the field agreed to certain positions established by extant theories regarding the adoption of VMDs and the role they play in promoting apparels in retail shops.

RECOMMENDATIONS

It is recommended that in their quest of promoting the Kente fabrics, there should be the need to adopt Integrated marketing communications, that is a marketing programme where retailers tactically co-ordinate all their marketing communications tools to deliver a clear,

consistent, credible and competitive message about the business and the Kente products they seek to promote.

Future researchers are advised to look at the role integrated marketing communications (IMC) play in the marketing of other fashion apparels. Lastly, the study being qualitative was carried out in the Ashanti Kingdom (i.e. in all the four towns noted for the production of Kente), it is advised that future researchers should replicate the study in other regions noted for the promotion and marketing of the apparel with the results also quantified.

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Evidence of Monthly Anomalies in Pakistan Stock Exchange

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Abstract

The study is an extended effort to investigate the monthly anomalies across Pakistani stock market, on four stock indices of Pakistan stock exchange by using the data from previously known as Karachi stock exchange for the period from January 01, 2009 to August 31, 2014. The study is a unique attempt of its kind to include all four indices for exploring turn-of-the-month and month-of-the-year effects with special consideration of tax-loss-selling hypothesis for the month of July for conventional January effect. Evidences of turn-of-the-month effect were found in indices except for KSE-30 and KMI-30 index. The study also found significant January returns evident in all four indices; however the effect cannot be contributed to tax-loss-selling hypothesis. Optimistic attitudes towards the year ahead and liquidity preference seem to be related with the heavy buying. July effect is found to exist in the market which may be contributed to tax-loss-selling hypothesis. Although, KSE-30 and KMI-30 indices were found to demonstrate atypical results as compared to the rest of the indices, yet it is concluded that stock market of Pakistan is not devoid of monthly anomalies.

Keywords: Pakistan stock exchange; Karachi stock exchange; Monthly anomalies; Tax-loss-selling; month-of-the year; turn-of-the month.

INTRODUCTION

The efficient market hypothesis (EMH) reflects the quickness of absorption and reflection of new information in the asset prices. It presumes the investor has an access to all available information and prices rapidly reflect the impact of all public information. New information in the market is assumed to be unpredictable and unsystematic; accordingly price movements are also irregular and random in an efficient market such that it assumes an equal chance of returns to investors. It implies that price fluctuations do not exhibit any trend and pattern and past prices cannot be taken as an instrument to predict the future prices and returns. The price movements in such a case is said to follow an unpredictable and unsystematic pattern called a 'random walk'. The said behavior shows evidences of indifferent-returns on stocks irrespective of size of the firm and the trading time, that is, returns are assumed to be homogenous across hours, days, weeks, months and years. However, for more than two decades in various financial markets of the world evidences of systematic patterns have been found. Such patterns may

result higher or lower stock returns depending on, certain days, weeks and months. Anomalies may occur even in the markets with low volatility and high liquidity and present serious threats to classical asset pricing models. The traditional asset pricing model is inept to explain this observed fact. Since decades the researchers are relentlessly inquiring the factors which can capacitate such systematic pattern.

Among such patterns most recurrent and widely known include; size effects; reflecting higher returns associated with small sized firms as compared to the large ones (Rozeff & Kinney, 1976; Banz, 1981; Keim, 1983; Roll, 1983); the seasonal or calendar effects including week-of-the-month (WOM) effect (Ariel, 1987; Lakonishok & Smidt, 1988), month-of-the-year (MOY) effect (Rozeff & Kinney, 1976), turn-of-the-month (TOM) effect (Cadsby & Ratner, 1992), the day-of-the-week (DOW) effect (Cross, 1973; French, 1980), and Islamic calendar effects (Mustafa, 2008). These effects have been tested internationally and diversified results can be found in various markets depending upon various institutional differences between developed and emergent markets.

The presence of such systematic patterns in the stock market explain the violation of and divergence from efficient market hypothesis at least in weak-form market efficiency because asset prices movements are no more random but may be predicted on seasonal and calendar variations. These differences in returns may be far above or below than the normal and can affect investor in deciding their investment strategy, portfolio selection and portfolio management (Anwar & Mulyadi, 2012). Technical analysts may develop strategies on the basis such predictable patterns to attract investor. This persuades the investors to follow such trading strategies which allow them to make abnormal profits in the markets (Yalcin & Yucel, 2006). For example, investors may be willing to buy stocks on one specific day or month and sells on another based upon certain trend in the market on these specific periods in order to take the benefit of these effects. However, the materialization of these trends is questionable, as for these anomalies may arise only for a very short period and disappear strangely and the strategic action was taken before could end up in disaster instead. Moreover, the reappearance of such patterns is less likely to be repeated in the same form leaving the investor in vacillating risk-return management. Explicably a normal investor does not feel safe and encouraged to invest in the market with the presence of such phenomena. Therefore, uncovering these patterns in returns might benefit risk management and portfolio optimization of valued investors in the markets (Engle, 1993) on one hand and may contribute in strengthening of previous observed facts or producing contemporary empirical patterns of calendar dependencies.

Month-of-the-year effect is associated with higher returns in any one month than any other months during a year. (Rozeff & Kinney, 1976) found seasonal pattern in an equal weighted index of New York Stock Exchange and found average monthly return on January are considerably higher (over one-third returns occurred in January alone) than during other months (January effect). January returns found higher as compared to remaining months in U.S. various other share markets (Rozeff & Kinney, 1976; Keim, 1983; Lakonishok & Smidt, 1984; Jaffe & Westerfield, 1985a; 1985b). Furthermore, Keim (1983), Aggarwal et al. (1990) found higher January returns in small firms than the large firms thus establishing the phenomenon to small firms. However, Patel (2008) concluded that both developed and emerging stock markets do not exhibit a size effect or a reverse size effect and according to the study conducted by him on Indian stock market he further established that size gains are not evident to be influenced by January month returns.

Another notion of the January effect appeared as tax-loss-selling (TLS) effect associated with a decrease in stock prices corollary to a major sell-off of stocks during the month of December; a strategy may be for counterbalancing the tax-loss on accrued capital gains, followed by an increase in buying during January. Although January effect has found to be diminishing in recent years, due to well-developed tax protection options become available with time, especially in seasoned capital markets. On the other hand, Haug & Hirschey (2006) found persistence January effect in U.S. small stock returns despite of the Tax Reform Act of 1986. Moreover, the anomaly is persistently evident in emerging capital markets as these markets are found relatively less developed and less efficient than their developed counterparts.

Roll (1983) concluded that the higher volatility of small-cap firms pay them to observe significant short-term capital losses that can make investors to sell before the end of December. This selling pressure might lead to reduction on prices of small-cap stocks in the tax month, escorting a bounce back next month as a result of repurchase to replenish the investments.

According to Lakonishok & Smidt (1988), turn-of-the-month (TOM) period is the duration between the last trading day of the previous month and first three trading days of the new month. Turn-of-the-month effect is associated with the temporarily increase in stock returns TOM period as compared to the rest-of-the-month (ROM) period. Increase of cash flow usually observed between the last two of the preceding and first three days of the new month. That increased liquidity may be connected to release of pension funds, interest payments and wages. Ariel (1987) examined Dow Jones and provided the evidence that days around the turn-of-the month exhibit high rates of return. Cadsby & Ratner, (1992) found turn-of-the-month effect evident in European, Canadian, US and emerging markets. Hensel & Ziemba (1996) found TOM effects for S&P 500, in a study carried out for daily returns between 1928-1993.

Several studies have been conducted to investigate the calendar anomalies on Karachi stock exchange (KSE). However, most of the studies were conducted on KSE-100 index leaving a major gap in the form of very little empirical work done on remaining indices belong to KSE such as KSE-30 index, all-share index and KMI-30 index. Amongst these; KSE-30 was introduced as a benchmark to determine the performance of stock market, KMI-30 consisted of firms which strictly meet the Sharia criteria, and all-share index takes all firms into consideration.

The selection criterion of listed companies in all four indices is based upon different methodologies; KSE-100 index and in all-share index both; the chronology is based upon market capitalization, but in case of former top 100 companies are selected, while in later; all firms are included in index. On the other hand selection of firms in KSE-30 and in KMI-30 is based upon free-float methodology and in KMI-30 index strictly Sharia compliant firms are included. Free float methodology may ensure the true liquidity of the shares in the stock market; therefore, is less expected to be handled by manipulators and hedgers and could be more reliable from the investors' point of view.

Hence, it is essential for the researchers to probe into calendar anomalies on all indices of Pakistani stock market, including traditional January effect in addition to turn-of-the-month and month-of-the-year effect. Shamshir & Mustafa (2014a) examined DOW effects on Pakistani stock market and found DOW effects in KSE-100 and all-share index. The study further noted the contribution of free floating methodology for finding no evidences of DOW effects in KSE-30 and KMI-30 index.

This paper is an extension to the previous work by us and is focused to investigate monthly anomalies including turn-of-the-month, month-of-the-year effect and tax-loss-selling effect on Karachi stock exchange. The tax month is June in Pakistan; therefore it will be interesting to find July effect for the conventional January effect and higher returns of July, if found, could present a plausible explanation of TLS effect in Pakistani stock market.

The rationale of investigating tax-loss-selling effect in Pakistan is for two reasons; one, the effect has not been tested thoroughly before on Pakistani stock market provides; a major motivation behind the exploration. Two, the discussion on this intriguing phenomenon would continue to remain a major interest of financial researcher and trade analyst to find the possible explanations of its existence and non-existence even if ceases to appear with time.

Wage distribution period may be one of the determining factor of revising portfolio decisions. Investors with monthly wage distribution are expected to re-address their portfolios at the time of receiving wages. In Pakistan, wage distribution period is between the last of the previous and first week of the subsequent month. It is imperative therefore to determine the TOM effects for Pakistani markets as investor is more likely to make investment decisions between TOM periods.

In this particular study TOM period constitute one last trading day of the previous month plus first three trading days. The rest-of-the-month (ROM) period is defined as the remaining days (Lakonishok & Smidt, 1988).

The study can be a major contribute in the finance literature and can benefit both; the investors when choosing any index among the four included in the study or a combination of indices for a diversified portfolio and risk management, and at the same time for trade analyst, while adopting appropriate trading strategies, if calendar anomalies are identified in any of the indices.

LITERATURE REVIEW

The phenomenon of stock market anomalies produces a great deal of inconsistent evidences and conflicting opinions by researchers and academicians. Black (1993) considered most of the anomalies as a result of data mining. In his opinion these anomalies vanishes as soon as they discovered and published.

In the words of Samuelson (1989),

“But of thousands of published and unpublished statistical testing of various forms of the efficient market hypothesis, a few dozen representing a minuscule percentage have isolated 10 pt milarly, Dimson & Marsh (1998) presented evidences where anomaly disappears or gets reversed, once it gets publicized.

Furthermore, Roll & Ross (1994) wrote,

“Over the past decade, I have attempted to exploit many of the seemingly most promising inefficiencies by actually trading significant amount of money... Many of these effects are surprisingly strong in the reported empirical work, but I have never yet found one that worked in practice”.

On the contrary greater number of well-known literature provides evidences of persistent market anomalies that remained persistent over the decades from developed and developing world markets. Empirical evidence also suggested that even in the presence of anomalies

investor is incapable to outperform for excess gains due to the high transaction and liquidity cost.

Among the early researches, Rozeff & Kinney (1976) found evidence of monthly anomalies on the New York Stock Exchange. Keim (1983) found distinct January premiums and did not refute the negative relation between abnormal returns and size of the firm. He further noted that more than 50% of the excess premiums in the month of January came on the first trading day of the month. Brown et al. (1983) found excess returns associated to size evident in one period and disappeared with the time, suggested that the evidence of seasonal anomalies could be one of the factors of estimation methodologies. Reinganum (1983) further stated that small firms least likely to follow the TLS behavior although found to exhibit excess returns in January and related the January TLS hypothesis to large firms. Contrary to that, Gultekin & Gultekin (1983) suggested irrelevancy of size with the-turn-of-the-year anomalies in US, UK and Australian markets. Lakonishok & Smidt (1984) conducted long term study spreads over to 90 years and found persistent long-term turn-of-the-month, turn-of-the-year and other seasonal effects. Ariel (1987) found the mean distribution of returns higher in the first half of the month than in the second half. Aggarwal et al. (1990) also documented the seasonal effects in Tokyo stock market.

Cadsby & Ratner (1992) presented the evidences of seasonal anomalies in European, Australian, and Canadian markets. Similar results were found in Japanese and Hong Kong markets. Roll (1993) argued that January anomaly in small sized firms is associated with TLS and explained that small-cap firms are more likely to at risk. Chang, Eric & Pinegar (1986) documented January effect in the US market for long-term bonds. The same effect found to be negatively related with bond rating and positively related with firms associated with low quality bonds. The study further supports the January effect consistent with TLS. Jaffe & Westerfield (1989) conducted a study to investigate the seasonal patterns in the stock markets of Australia, UK, Japan and Canada. The study confirms a distinctive seasonal pattern for each country with stronger 'last day of the month' effect. Brauer & Chang (1990) identified the TLS as a possible explanation for January effect. They noted the returns to exhibit negative and positive relations to the mean returns of the preceding year and the standard deviations of their preceding year returns, respectively reflecting TLS effect in the January. Arsal & Coutts (1997) supported the presence of weekend, January and holiday effects on Industrial Ordinary Shares Index when studied for the span of 60 years. The study found anomalies still concluded that the market may be incapable to be exploited for abnormal returns owing to the illiquidity and two side transaction cost of implementing trading strategies.

Recent literature produces mixed results regarding the existence of annual anomalies and excess returns in the market.

Coutts et al. (2000) investigated Athens stock market using ten years data set on banking, leasing and insurance sectors and found presence of weekend and January effects which gradually strengthened over time. He further noted that abnormal profits thus rendered after adjusting transaction cost do not affect the profitable strategies of investor, therefore offering the investor an efficient market situation.

Al-Khazali (2001) audited previous studies from 1926 to 1993 for seasonal effects in high-yield bond and confirmed the January effect and endorsed the appropriateness of statistical procedures adopted in previous studies.

Sullivan et al. (2001) conducted a study that was focused to explore the effects of data mining on the occurrence of various anomalies; the possibility identified by Lakonishok & Smidt (1988). They used the century data of daily returns and adopted the bootstrap technique that can separately measures the distortions in deducting inferences stimulated by data mining. They concluded that even significant calendar effects when are evaluated for certain rules set by investors and academicians seems to lose their significance to outperform the market to exploit abnormal returns.

Consistent with the work of Black (1993), and Dimson & Marsh (1998); Marquering et al. (2006) advocated that anomalies if occur out of data snooping they are more likely to get disappeared after they get documented leaving the real anomalies continue to persist. They assumed that once the anomalies get reported and published by researchers and academicians, they get diluted and ceased to exist. The prospects and possibilities of strategies employed for exploiting abnormal profits thus die down gradually. The authors examined frequently occurring anomalies and found that very few anomalies still exist and many of them disappeared after the published awareness about them. Moreover, the study found the connection behind the timing of disappearance and reappearance of certain anomalies with the timing of respective publications about such anomalies.

Asteriou & Kavetsos (2006) tested eight transition economies from 1991-2003 for seasonal effects. The study found significant January effect in Hungary, Poland and Romania, with a prominent evidence of TLS hypothesis in Hungary and Romania.

Similarly, Starks et al. (2006) supported the association of TLS hypothesis with January effect for municipal bond market. The study further indicated a strong tax selling behavior for the funds traded with the brokerage firms.

Moller & Zilca (2008) investigated January effect across size deciles based on market capitalization on the monthly data from NYSE, AMEX and NASDAQ from 1927 to 2004. The study found short term January effect across deciles with significant higher returns in the first part of January and mean reversion in the second part of January.

Moosa (2007) examined Kuwait stock market and found monthly anomaly in June, on account of accumulating stocks in the month of June, before going to summer vacations, thus creating June effect. The results are consistent with the summer holiday effect previously found by Al-Saad and Moosa (2005) as July anomaly.

He & He (2011) related January effects with size before the Tax Reform Act of 1986, on US stock market. He found the shift of January effect to November effect after the tax reforms. The November effect was observed in both large and small-cap firms and therefore not related to size. Whilst, Haug & Hirschey (2006) found January effect persistent in small firms in the US stock market.

Agnani & Aray (2011) examined January effect across high and low volatility regimes distinguished by Markov switching model. The results revealed substantially larger magnitude of January effect in high volatility regime, although the number of significant coefficients is larger in low volatility regime. The study further revealed significant January effect for all size portfolios and hence concluded the absence of any correlation of January effect with portfolio size. The results of the study also support the diminishing January effect with time for all sizes.

Depenchuk et al. (2010) examined the Ukrainian stock and bond markets to find monthly anomalies. The study found no evidence of January and weekend effects but strong TOM effect found to have existed in Ukrainian stock market.

Shamshir & Mustafa (2014b) suggested the investigation of market anomalies using weekly and monthly stock returns.

Friday & Hoang (2015) tested Vietnam Stock Exchange and support January effect for the entire period, while he concluded these effects are not explained by TLS.

DATA AND METHODOLOGY

The study is determining month-of-the-year anomaly focusing TLS hypothesis and turn-of-the-month anomaly on Pakistani stock exchange by using the data from previously known as Karachi stock exchange (KSE) for the period from January 01, 2009 to August 31, 2014. The study is using the daily closing prices of the four indices operating in the KSE market; KSE-100, KSE-30, KSE all-share and KMI-30 indices.

To proceed with the investigation of random walk we first calculate the return series of all the indices in the stock exchange. To focus on returns rather than on prices is due to two reasons. First, since the financial markets are considered to be the close to perfect competition therefore the size of investment does not influence prices. Secondly, the returns are more attractive from the perspective of investor and at the same time more appropriate to fulfill the approach statistical analysis than prices.

Volatility is highly persistent in KSE-100 index and least persistent in KSE-30 index; two most traded indices of Pakistani stock market (Shamshir & Mustafa, 2014a).

The null hypothesis of equal monthly returns is used to examine monthly anomaly and TLS effect. For examining of month-of-the-year and turn-of-the-month effect stock returns first descriptive statistics will be examined to observe the MOY, TOM and ROM period mean returns and the way standard deviation is related to mean returns.

The dummy variable approach in regression is being used here where each individual dummy variable accounts for the excess return for the particular month for investigating MOY effect (Equation 1) and TLS effect. Similarly, in case of examining TOM effect (Equation 2) the dummy variable accounts for the excess return for the TOM period with null hypothesis of zero difference in returns between TOM and ROM period (Lakonishok & Smidt, 1988; Cadsby & Ratner, 1992).

$$R_t = \sum_{i=1}^{12} \gamma_i D_{it} + \varepsilon_t \quad \text{Equation 1}$$

$$R_t = \alpha_1 D_{ROMt} + \alpha_2 D_{TOMt} + \varepsilon_t \quad \text{Equation 2}$$

Where

$t = 1, 2, \dots, T$

R_t = Stock return on an index at time t .

D_{it} : Dummy variable corresponding to 12 months

D_{TOMt} : Dummy variable corresponding to TOM days

D_{ROMt} : Dummy variable corresponding to ROM days

ε_t Random disturbance term $\varepsilon_t \sim N(0,1)$

ANALYSIS AND RESULTS

Descriptive Statistics of Monthly Returns

Table 1, below reflects the descriptive statistics of monthly returns. Results indicate mostly positive mean returns in all months with highest during March and July. The value of standard deviation is highest (0.1387) in case of KMI-30 index in the month of February. Negative mean returns are evident for the month of May while positive higher can be seen for the month of July. Low and mostly negative returns in May indicate large selling and higher and mostly positive returns in July signify large buying in July. The higher returns in July may be attributed to the same reason as in January effect where higher returns in January may be ascribed to more buying following a sell-off occurred during the month of December to compensate the tax losses.

Table 1: Descriptive Statistics of Monthly Returns

	KSE-100 Index		KSE-30 Index		KSE-All share Index		KMI-30 Index	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Jan	-0.0004	0.0150	0.0006	0.0181	-0.0004	0.0141	0.0020	0.0163
Feb	0.0010	0.0117	0.0014	0.0142	0.0008	0.0111	0.0012	0.1387
Mar	0.0034	0.0140	0.0031	0.0158	0.0032	0.0132	0.0041	0.0144
Apr	0.0016	0.0133	0.0011	0.0153	0.0015	0.0130	0.0016	0.0144
May	-0.0003	0.0111	-0.0004	0.0501	-0.0004	0.0536	0.0002	0.0108
Jun	0.0008	0.0103	0.0001	0.0125	0.0007	0.0101	0.0005	0.0101
Jul	0.0028	0.0088	0.0033	0.0101	0.0026	0.0082	0.0033	0.0086
Aug	0.0001	0.0126	0.0000	0.0141	0.0000	0.0122	0.0005	0.0826
Sep	0.0021	0.0110	0.0013	0.0125	0.0020	0.0105	0.0018	0.0113
Oct	0.0010	0.0109	0.0003	0.0124	0.0008	0.0103	0.0012	0.0120
Nov	0.0015	0.0092	0.0011	0.0106	0.0017	0.0089	0.0017	0.0096
Dec	0.0015	0.0078	0.0010	0.0089	0.0015	0.0075	0.0013	0.0079

OLS Results for the Month-of-the-year Analysis

Table 2, below in showing regression results reveals the significant January effect in the market, which can be attributed year-end cash flows arising from debt contracts redemption. Another plausible explanation is the investors' optimism and confidence on the market for new-year investment resolution. It is to be noted that January seasonal is not credited to TLS hypothesis, owing to June as tax month in Pakistan. Table 2, also indicates June negative returns and July positive returns in all four indices. Moreover, significant July effect is very obvious in KMI-30 index implicating TLS related July effect.

Table 2: OLS Results for the Month-of-the-year Analysis

	KSE-100 Index				KSE-30 Index			
	Coeff.	Std.	t-stat	Prob.	Coeff.	Std.	t-stat	Prob.
Jan	0.6982	0.1542	4.5269	0.0000	0.8067	0.1486	5.4302	0.0000

Feb	-0.0311	0.2290	-0.1357	0.8924	-0.0328	0.2192	-0.1498	0.8813
Mar	-0.1074	0.1668	-0.6440	0.5214	-0.0411	0.1747	-0.2356	0.8144
Apr	-0.0651	0.1878	-0.3465	0.7298	-0.1221	0.1945	-0.6282	0.5316
May	0.1324	0.1977	0.6698	0.5049	0.0281	0.0505	0.5568	0.5792
Jun	-0.1984	0.2181	-0.9096	0.3657	-0.1952	0.2105	-0.9273	0.3564
Jul	0.2586	0.2559	1.0104	0.3152	0.3407	0.2533	1.3448	0.1823
Aug	0.0453	0.1767	0.2565	0.7982	0.0084	0.1857	0.0454	0.9639
Sep	-0.0218	0.2021	-0.1079	0.9143	-0.0450	0.2126	-0.2116	0.8330
Oct	0.1865	0.2113	0.8826	0.3800	0.0887	0.2226	0.3986	0.6912
Nov	0.2210	0.2697	0.8197	0.4147	0.2573	0.2626	0.9798	0.3300
Dec	-0.0158	0.3054	-0.0519	0.9588	-0.0818	0.3038	-0.2692	0.7884

Table 2: OLS Results for the Month-of-the-year Analysis (Contd.)

	KSE-All share Index				KMI-30 Index			
	Coeff.	Std.	t-stat	Prob.	Coeff.	Std.	t-stat	Prob.
Jan	0.6753	0.1572	4.2945	0.0000	0.7243	0.1449	4.9995	0.0000
Feb	0.0024	0.2285	0.0107	0.9915	0.0279	0.0189	1.4727	0.1447
Mar	-0.1255	0.1680	-0.7471	0.4571	-0.0878	0.1579	-0.5558	0.5798
Apr	-0.0912	0.1824	-0.5000	0.6184	-0.1271	0.1772	-0.7177	0.4750
May	-0.0051	0.0393	-0.1295	0.8973	0.1661	0.2181	0.7615	0.4485
Jun	-0.1845	0.2164	-0.8526	0.3963	-0.2449	0.2321	-1.0552	0.2944
Jul	0.2611	0.2663	0.9805	0.3297	0.5852	0.2683	2.1812	0.0320
Aug	0.0352	0.1752	0.2011	0.8411	0.0217	0.0321	0.6776	0.4999
Sep	-0.0135	0.2040	-0.0660	0.9476	0.0904	0.2067	0.4376	0.6628
Oct	0.1847	0.2133	0.8658	0.3891	0.2117	0.1960	1.0801	0.2833
Nov	0.2364	0.2677	0.8830	0.3798	0.2433	0.2529	0.9621	0.3388
Dec	0.0425	0.3029	0.1402	0.8889	-0.1788	0.3033	-0.5896	0.5571

Table 3: Descriptive Statistics of TOM and ROM period Returns on KSE Indices

		Mean	Std. Dev.
		KSE-100 Index	TOM
	ROM	0.0006	0.0100
KSE-30	TOM	0.0042	0.0200

Index	ROM	0.0263	0.5100
KSE-All	TOM	0.0026	0.0100
Share			
Index	ROM	0.0007	0.0200
KMI-30	TOM	0.0035	0.0100
Index	ROM	0.0009	0.0500

Table 3, exhibits the descriptive statistics of TOM days; one last trading day of the previous month plus three first trading days of the next month and ROM days; the-rest-of-the-month days. Table 3, also depicts positive mean returns in both TOM and ROM period in KSE indices however, significantly higher mean returns in TOM period than the rest of the days, except for KSE-30 index. These findings are consistent with the results of Lakonishok and Smidt (1988). For KSE-30, TOM effect seems to be absent with high mean return value and high risk during ROM days.

Table 4: OLS Results for Turn-of-the-month Analysis

		Coeff.	Std.	T-stats.	Prob.
KSE-100	TOM	0.0031	0.0007	4.5934	0.0000
	ROM	0.0007	0.0003	1.9960	0.0461
KSE-30	TOM	0.0042	0.0277	0.1518	0.8794
	ROM	0.0263	0.0136	1.9388	0.0527
KSE-All share index	TOM	0.0026	0.0010	2.4508	0.0144
	ROM	0.0007	0.0005	1.4641	0.1434
KMI-30	TOM	0.0035	0.0026	1.3457	0.1786
	ROM	0.0009	0.0013	0.6873	0.4920

Table 4, illustrates the OLS results with TOM and ROM as dummy variables in the model. Results reveal significant TOM effect in the stock market. TOM effects are found to be significant at 5% or lower level in KSE-100, and KSE-all share. However, in case of KSE-30 and KMI-30 indices no TOM effects are found during the study period. The absence of turn-of-the-month can be contributed to the free floating methodology of shares employed in KSE-30 and KMI-30 indices. Shamshir and Mustafa (2014a) also concluded that absence of day-of-the-week anomaly for KSE-30 and KMI-30 index is associated with the free floating methodology of shares in these indices.

SUMMARY AND CONCLUSION

This paper is focused to investigate monthly anomalies including turn-of-the-month, month-of-the-year effect and tax-loss-selling effect on Pakistan stock exchange, by using the data of previously known Karachi stock exchange. The tax month is June in Pakistan; therefore, the study was more interested in finding July effect for conventional January effect associated with TLS.

The dummy variable approach in regression was applied where each individual dummy variable accounts for the excess return for the particular month for investigating MOY effect and TLS effect. Similarly, for examining TOM effect, the dummy variable accounts for the excess return for the TOM period with null hypothesis of zero difference in returns between TOM and ROM period.

The study found significant January returns evident in all four indices; however the upsurge in returns cannot be credited to TLS hypothesis but may be attributed to psychology of the investor;

The optimism and confidence linked with new-year resolution. Moreover, buying elevation also explains the liquidity preference approach of investors reflected in investment management strategies for the year to proceed.

Negative June returns and positive July returns explains the July effect synonymic to traditional January effect reflecting conventional TLS strategies of investor, concluding the presence of such an effect in Pakistan stock exchange.

Similarly, TOM effects are found with the significant t-statistics, concluding higher returns associated with greater cash flow in TOM defined periods. However, TOM effect could not be found KSE-30 and KMI-30 index.

Although, KSE-30 and KMI-30 indices were found to demonstrate atypical results as compared to the rest of the indices, yet it is concluded that stock market of Pakistan is not devoid of monthly anomalies.

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Financial Stability Report: Lessons from the Central Banks

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Abstract

The economic and social costs of the financial crises are very high led the central banks to register financial stability, in addition to the price stability, in the middle of their concerns. Nevertheless, the objectives of the central banks as regards financial stability are less clear and specific that in the monetary field. This difficulty related to the abstract character and multidimensional of the concept of financial stability makes difficult to quantify an objective, to check the realization of it and complicates the communication strategy to be adopted on the matter. In spite of these difficulties, the central banks reinforced their communications as regards financial stability by the publication of Financial Stability Report (FSR). The latter describe the various risks overall weighing on the stability of the financial system and formulate a judgment on its impact strength and its capacity to reabsorb the various potential shocks. The RSF aim reinforcing the transparency on the various components of the financial system and at supporting the emergence of a framework of co-operation between the various speakers. Vis-a-Vis the stakes of financial stability, the majority of the central banks widened their missions with the maintenance of financial stability. In the same way, they recorded signification advances in the installation of the framework of financial stability (institutional, lawful, and operational). Within this framework, this paper tries to describe the practices of the central banks as regards development of the FSR and formula of the recommendations aiming at proposing an exhaustive analysis of the FSR. Initially, it presents the objectives sought through this communication strategy and examines, without going into the details, the structure adopted in the development of the RSF.

Keywords: Financial stability, systemic risk, macro stress test, financial soundness indicators. JEL classification: E44, D42

INTRODUCTION

Well before the international financial crisis of 2007-2008, several central banks were interested in financial stability in answer to the increase in the banking crises and their securities on the good being of the economic agents. This increased interest materialized primarily through the publication of the financial stability Report, recalling the evolutions of the financial systems and systemic risks. During this period, the analysis of the financial system was regarded as one of the fundamental missions of the Central banks in bond primarily with their roles of monetary authorities and supervisors of the money markets, the banking institutions and the payment systems.

The lesson drawn from the recent crisis gave more dash to this practice because of the new role of the central bank as regards financial stability. From now on, the monetary authorities must contribute, according to various methods, to the prevention of the systemic risks and the maintenance of the good performance of the financial system. For this purpose, the new macro-prudential instruments were placed at their disposal to guarantee the impact strength of the financial system and to reduce its procyclicality.

The FRS make it possible to follow and analyze the risks and the possible transmission channels of the shocks affecting the financial system, in order to guard itself against the systemic crises. The difference in the other report (on the banking supervision and the systems of payment, etc.), the latter analyze the systemic risks, to identify the areas of vulnerability and to as a whole evaluate the degree of impact strength of the financial system (a macro-prudential monitoring).

The examination of the Central banks experiments as regards development of the FSR reveals that until now no consensus was established with regard to the structure of these reports and even less for the tools and the indicators to be used. The difficulty in sitting the best-practices on the matter is the principal consequence of the difficulty of determining with precision the concept of financial stability and of the structures very different from the financial systems.

This paper, structured in five sections, aims to describe the practices of the central banks as regards development of the financial stability report. First of all, it presents the factors influencing the decision to publish a FSR and the objectives sought through this communication strategy. Then, it examines the structure commonly adopted in the development of the FSR. Thereafter, it presents the indicators used in these reports. Lastly, a last point was devoted to the examination of the place of the stresses tests and the macro stresses testing in these reports, like new tools for evaluation of the risks of financial instability.

WHO PUBLISHES THE FSR?

The evaluation of financial stability implies the monitoring continues and the risk analysis and of the vulnerabilities potentials weighing on the financial system. This evaluation facilitates the formulation of a judgment on the degree of impact strength of the financial system which can be communicated with the general public in order to allow a better evaluation of the risk and an efficient management of economic anticipations. Among the approaches of communication at the disposal of the central banks, the publication of the Reports of Financial stability occupies an important place.

Several central banks started to publish FSR in the objective to limit the phenomena of financial instability by informing the Government, the institutions financial and not - financial, the markets and the general public on the principal risks and vulnerabilities. Although the current crisis stimulated the publication of these reports, the number of countries having already published a FSR remains limited.

The first attempt at publication of RSF was that of the Bank of England in 1997, after the fall of several banks (Bank of the Credit and International business (BCCI) in 1991 and Barings in 1995). Then, several Scandinavian countries having lived difficulties similar to the level of their banking sectors (Finland (1991-1994), Norway (1987-1993) and Sweden (1990-1993)) borrowed the same way.

This attempt at publication of the FSR was reinforced after the advent of the international financial crisis because primarily of attribution at the central banks of a new mission of financial stability centered mainly on the macro-prudential regulation. According to the study of Cihak and Al. (2012), on a total of 177 countries, 84 countries published RSF in 2011 compared to 60 in 2006. This increase confirms the fact that the publication of the RSF is often stimulated by the advent of the financial crises and banking. Indeed, the countries having lived banking crises were precursory in the development of the FSR in order to be guarded against future crises (for example Asian and other countries and of the Latin America).

In the same way, the analysis of the relation between the decision to publish a RSF and the advent of the banking crises shows that the countries having lived crises were most active as regards publication of these reports. Thus, on 102 countries which lived a crisis, more than 50% already their RSF communicated. On the other hand, on the 75 countries which were not touched by a banking crisis 42% only published their reports.

Tableau 1 : relation between publication of the FSR and crises banking			
The countries which:	Not crisis	Crisis	Total
Do not publish	43	50	93
Publish	32	52	84
Total	75	102	177

Calculation author, source MFI database and sites of the central banks

In addition to the banking experiments of crises, other factors in particular related to the level of development of the countries condition the decision of publication of the FSR. Thus and according to the analysis of the country constituting our sample, it arises that among the countries having published a FSR more than 44% are developed nations, 19% are emergent countries and 31% of the countries are in the developing. On the other hand, the sample of the countries which did not choose the publication of the RSF yet is mainly composed of the economies under development and with weak development (Figures 1).

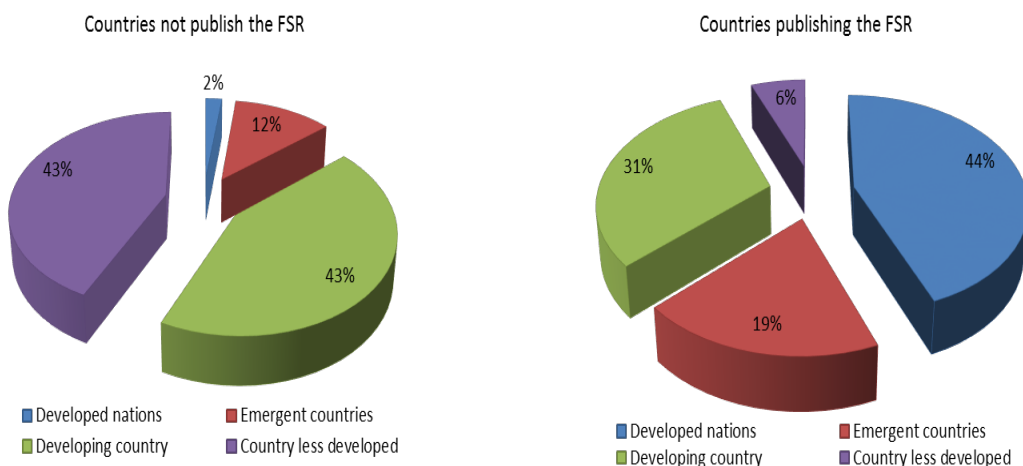


Figure 1. FSR and level of development

On the same register, on 39 developed nations more than 94% already their FSR communicated. As for the emergent countries, 60% published their FSR. On the other hand, the analysis of the developing countries and those with weak development indicate that the majority of them did not publish reports of financial stability yet (see table hereafter).

Tableau 2 : FSR publication according to the level of development of the countries

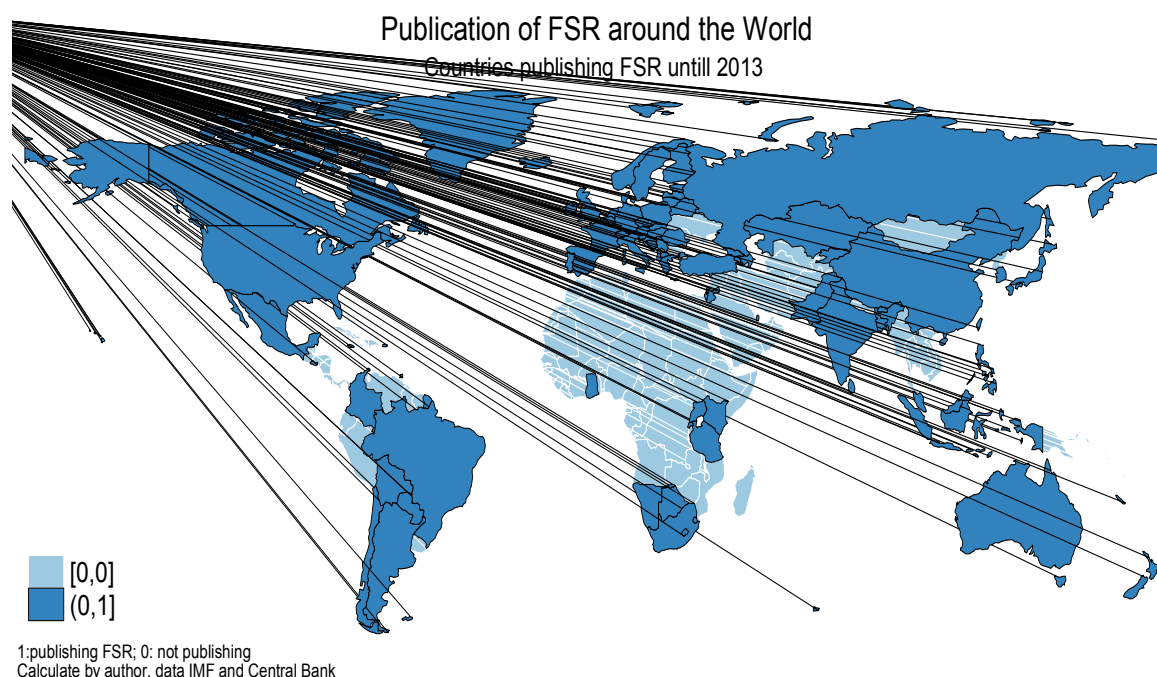
Publication	Developed nations	Emergent countries	Country sees development of it	Country with low-income	Total
Do not publish	2	11	40	40	93
Publish	37	16	26	5	84
Total	39	27	66	45	177

In addition, the publication of the RSF is also explained by the size of the financial system. The countries having developed financial systems are brought to produce FSR than those whose financial system is less dominating. Indeed, for the countries having already published FSR the credit to GDP ratio is close to 100%. On the other hand, the countries which did not publish a RSF yet have an average ratio from approximately 48% (table 3).

Tableau 3: FSR publication according to the level of financial development

Group country	Number	Average Credit to GDP in %
Do not publish	67	48

At the regional level, the publication of the RSF is largely widespread on the level of Europe, Asia and the Latin America. The majority of the countries of these areas communicated FSR well before the international financial crisis. It is not that after the fall of Lehman Brothers that the United States and more than 20 other countries published their FSR. Africa and the Middle-East remain late as regards publication of the FSR. Indeed, to the level of the area only some countries already published their FSR. It is about Jordan (2010), Bahrain (2007), Qatar (2009) and recently Oman (2013) and Morocco (2015). With regard to the African continent, South Africa (2004), Ghana (2005), Kenya (2004), Uganda (2009) and the Central Bank of the States of West Africa (BCEAO, 2006) overall communicated their RSF before the advent of the international financial crisis.



WHY PUBLISH A FSR?

The publication of the FSR, according to Svensson (2003), aims at informing the public and the economic actors on health of the financial system and constitutes an instrument of early alarm for the agents concerned and the regulatory agencies financial when problems are profiled at the horizon. In general, three aims are had by the publication of the FSR. It makes it possible to contribute to the total stability of the financial system, reinforces the responsibility, the credibility and the transparency of the central banks and supports the cooperation between the various authorities implied in the maintenance of financial stability.

To contribute to the total stability of the financial system. The regular analysis of the financial market evolution and the identification of the risks support the early detection of the potential threats and thus the adoption of precautionary measures (macro-prudential) and corrective (management of the crises) suitable. Also, by informing the public on the state of the financial system, the publication of the FSR thus facilitates decision making in terms of macro-prudential policies and management of the crises and contributes, consequently, with the stability of the financial system. This objective is transcribed clearly in one of the FSR of the Central Bank of Austria (2001) "Central Bank decided to regularly publish a report on financial stability in order to inform all the actors of the financial markets and the general public on the problems which could occur in the event of distress".

To reinforce the transparency, the credibility and the financial responsibilities of the regulatory agencies. As regards financial stability, the responsibility for the authorities in charge of this mission is closely related to their capacity to explain and justify the utilization of macro prudential (preventive and corrective) firms through an attentive examination of the areas of risk and transmission channels of the shocks. Thus, the transparency on the evolutions of the financial system and the established judgment, is essential in order to guarantee a better comprehension and transmission of the decisions of the macro-prudential policies and consequently to sit occasion credibility as regards maintenance of financial stability (Lastra (2001)).

To strengthen the cooperation between the various authorities on the questions of financial stability. According to the National Bank of Belgium (2002), the FSR aims stimulating not only the debate on the risks and the vulnerabilities, but also, at contributing to the reinforcement of the cooperation between the authorities in charge of financial stability. This cooperation develops as well on the national plan as international and regional. Indeed, at the national level, the publication of the FSR makes it possible to inform the unit of the regulatory agencies on the situation of the financial system and the relevance of the decisions to be discussed and implement at resulting from the meetings from the national committees (management board of the crises, systemic committee risks). In the same way, the development of the RSF supports the international cooperation through the identification of the risks on the level of each country. This analysis makes it possible the other countries to evaluate their cross-border exhibitions and to limit the contagion and the probability of supervening of international financial crisis.

In addition to these three objectives, the FSR also contributes to reinforce the micro-prudential monitoring and the control of the monetary policy. Although this report have a systemic orientation, the analysis which it provides is capable to identify the areas of vulnerabilities likely to be examined by the supervision authorities in order to limit the probability of supervening of the systemic crises. In the same way, the analyzes carried out on the level of the FSR in particular make it possible to look further into the comprehension of the economic conditions and financial, important dimension in decision making as regards monetary policy.

HOW TO STRUCTURE A FSR?

Although the structure of the FSR varies from one country to another, it remains generally made up of two great parts. The first, constituting the hard core of the report, is interested in the examination of the risks and the vulnerabilities of the financial system and in the evaluation of its degree of impact strength to the shocks. It is articulated around several axes. First of all, the national and international macroeconomic and financial environment is analyzed. Then, this part treats domestic market evolutions financial, infrastructures of market and financial and not - financial institutions. Moreover, it presents an evaluation of the degree of impact strength of the financial system and in particular of the banking sector vis-a-vis the macroeconomic and financial shocks most plausible. The second part of FSR, as for it, is primarily made up of items and special issues treating of the related questions with financial stability and of private interest for the monetary authorities (BIS, Comity I. Fisher (2005)).

In the majority of the FSR, the first part accounts for approximately 2/3 of the total contents. Certain countries like France reserve only the 1/3 to him, whereas others devote the totality of the report to him, as it is the case for Norway.

The first part of the FSR is structured in order to describe the process of evaluation of financial stability. Several indicators are used within this framework in order to identify the areas of vulnerability. These last can rise from unfavorable macroeconomic conditions, a particular economic sector or exogenous shocks coming from the foreign financial markets. They can also emanate from an imbalance of the financial markets or brittleness of the financial institutions.

The analysis of the macroeconomic conditions makes it possible to identify the negotiable instruments of an economic contraction on the stability of the financial system. In this respect, an economic recession or a sectorial imbalance can involve a rise of the defects of the economic agents and affect consequently the solvency of the financial institutions and the assets value. Also, the foreign or international expositions can also have significant negotiable instruments on financial stability because of the potential interconnections between the various financial markets and of the increasingly important integration of the economies. In the same way, the existence of financial institutions and not-financial operating in several countries contributes to amplify the importance of the cross-border risks.

The risks emanating of the financial sector can come from the idiosyncratic or systemic problems relative to financial expositions, difficult conditions on the capital market or the weaknesses in the infrastructure of the markets. Thus, the default of a systemic financial institution or a large debtor can cause a stop of the transactions on the markets and result in a strong financial instability. Also, the existence of instability phenomena, in particular the financial bubbles, can increase the probability of materialization of systemic risk. In addition, other risks can result from the infrastructure of market and in particular from the payment and settlement systems.

Thus, the first part of the FSR aims at the examination of three axes: first milked with the analysis of the sources of international vulnerabilities, second is intended for the examination of the endogenous macroeconomic conditions, while the last is capable to evaluate the risks emanating of the financial system.

bank	cy							
Central Bank European	Annual	- Outline of the risks weighing on financial stability (5%)	- Macro-financial Environment (27%)	- Financial system of the Euro area (38%)	- Specific Area (24%)			
Bank of England	Semi-annual	- Outline (10%)	- Risk credit (24%)	- Risks related to the international financial system (11%)	- Impact strength of the British financial system (6%)	- Solidity of the infrastructures of the financial market	- Items (40%)	
Riksbank	Semi-annual	- Foreword + Summarized (15%)	- Evaluation of stability	- Financial market and price of the real estate (11%)	- Them borrowers of the Swedish banks (15%)	- Development of the banks (11%)	- The financial infrastructures (14%)	Items (34%)
Bank of Spain	Semi-annual	- Introduction (16%)	- Chapter I: Banking risks (35%)	- Chapter II: Profitability (14%)	- Chapter III: Solvency (12%)	- Items and glossary (22%)		
Banque de France	Semi-annual	- Summary (3%)	- Economic environment And International Financier (15%)	- Financial sector (20%)	- Items (55%)			
Bundesbank	Annual	- Outline (5%)	- Macroeconomic Prospects and risk factors (9%)	- International Financial system (25%)	- Financial Intermediaries in Germany (25%)	- Regulation framework and infrastructures of the financial market (13%)	- Appendix (6%)	
Bank of Canada	Semi-annual	- Outline + Raised Problems (20%)	- Macro-financial Environment (8%)	- Tendencies of the financial system (13%)	- Reports/ratios (15%)	- Policies and development of the infrastructures (15%)	- Summary of the research tasks	
Bank of China	Semi-annual	- Summary (7%)	- Regional and world Context (30%)	- Cost savings domesticate (25%)	- Financial sector and monetarist (20%)	- Prospects, risks and uncertainties (16%)		
Federal fund	Annual	- Outline (7%)	- Development of the banking balance-sheets (28%).	- Tendencies of profitability and the banking risks (21%)	- International Operations of the American trade banks (0.5%)	- Recent Developments (0.5%)	- Appendices (43%)	
Bank of Japan	Annual	- Summary	- Development of the profits and the Balance-sheet of the Japanese Banks (5%)	- Progress in order to eliminate the risks (14%)	- Evaluation of the risk related to the wallet of the assets (7%)	- Profitability (9%)	- Stakes for the future (4%)	
Central Bank of Turkey	Semi-annual	- Outline (3%)	- International expansion (7%)	- Cost savings domesticate (19%)	- Risk and development of the banking system (22%)	- Financial infrastructure (11%)	- Particular Subjects (17%)	
Central Bank of	Semi-annual	- Summary	- External Environment	- External Financing	- Local Financial	- Users of the	- Banking system	- Financial Regulation and infrastructure (27%)

Chile	(3%)	t and financial risks (9%)	: flow of capital and foreign debt (5%)	market (5%)	appropriations (17%)	(14%)
Central Bank of South Africa	Semi-annual	- Outline (3%)	- Macro Development financial international (22%)	Prudential macro Analysis domestica tes (38%)	- Financial Infrastruct ure and regulation (16%)	

Source: developed nations (Bank for international settlement (BIS, 2006)) and emergent countries (sites of the central banks)

On the organizational level, the majority of the FSR are structured in order to analyze the whole of these sources of vulnerability by adopting a definite plan either in sectorial term or in term of risk. The RSF of the sectorial type, analyze in a separate way each sector and market in order to determine the various risks and the possible interactions being able to induce a systemic risk. On the other hand, the FSR structured in terms of risk are delayed on the most important risks and describe their level and their impact in the event of materialization.

The structure of the financial stability report is heterogeneous because of specificities of the economies and the financial systems of each country. Some are focused more on the banking system, as it is the case of the Bank of Spain, Bank of France and Riksbank in particular because of the importance of the banking system in the financing of the economy. On the other hand, other central banks also integrate the other types of financial institutions such as the Bank of England, the ECB, Bundesbank and the Central Bank of Singapore. With regard to other dimensions to be analyzed on the level of the report/ratio of financial stability (macroeconomic conditions, markets of capital and infrastructures), the whole of the central banks integrate them in a regular way.

On the basis of this analysis of the structures of the FSR of the central banks, it is recommended to adopt a sectorial approach. The report will have to thus contain an analysis of the main components of the financial system, the risks most projecting and possibly of the principal transmission channels of shocks. Thus, the financial stability report could be structured in the following way:

1. Highlight: it summarizes the whole of the results and analyzes transcribed in the report and makes it possible to give a comprehensive view on the risks weighing on financial stability. Following the example other central banks, this chapter will have to comprise a graph in cobweb (risk map) describing the evolution of the economic and financial vulnerabilities weighing on the financial system.
2. Chapter I “macro-financial Environment”: this chapter describes the evolution of the economic conditions and financial developed nations and emergent. It is a question of following the principal economies, in particular Europe and the USA, through the principal macroeconomic aggregates (growth, inflation, unemployment, etc...), to analyze macroeconomic and financial imbalances with the international level and to describe the various policies of the central large banks being able to affect national and international financial stability. This chapter also analyzes in a detailed way the evolution of the domestic macroeconomic conditions through the follow-up of the key macroeconomic aggregates, of which in particular the economic growth, unemployment, the external vulnerabilities, public finances especially on budgetary sustainability and the evolution of the public deficit.
3. Chapter II “real Sector”: this chapter analyzes the economic conditions and financial firms and households through a rigorous follow-up their inheritances. This chapter approaches the sectors headlights of the economy in particular the real sector. With

regard to the households, this chapter should allow a follow-up of the indicators of consumption, income, saving and appropriations. Being the firms, an analysis of their situations economic and financial should be carried out on the basis of several indicator of which in particular manufacturing output, the contribution of the sectors in the growth, the utilization ratio of the capacities to produce and evolution of clear creations of firms. Also, several other balance sheet indicators are to be analyzed in order to determine the evolution of the financial conditions of the firms, it acts; return on assets (ROA), return on equity (ROE), leverage ratio, coverage ratio, working capital ratio and evolution of the appropriations by typology.

4. Chapter 3 "Financial institutions, capital markets and financial infrastructure": it is delayed on the analysis of the financial system by treating the financial conditions (structure, development and efficiency) of each component of the financial system (banks, specialized financial institutions, reinsurance and insurance companies, pension funds and finally finance companies) and the principal risks (credit risk, risk of market, risk liquidity, risk profitability and risk solvency) heavy on this last. The first part will have to relate to the banking system and the other finance companies through the follow-up of a panoply of indicators of which in particular the structure of the assets and banking liabilities and decomposition of the account of the products and charges. With regard to the other financial institutions, except field of supervision of the central banks (pension fund and reinsurance, insurance companies), the analysis is founded on the follow-up of the charges, the incomes, the premium accounts issued by category of insurance and of the liabilities and assets. The second part, constituting the core of the report/ratio, is interested in the principal risks weighing on financial stability. This chapter analyzes also the market evolution stock-brokers, bond-holders and of exchange through several indicators of which in particular those relating to the outputs, the procurement processes and of sale, to volumes of the transactions and volatilities. Have regard to the importance of the financial infrastructure in the maintenance of the solidity and the efficiency of the Moroccan financial system, a last section of this chapter should be devoted to the exhibition of the evolutions in term of legislation and term of technology of the financial platform relating to the systems of payment, of payment and netting. For this reason, various indicators can be used like: the number of transactions day laborers, the number of electronic charts in circulation, the number of systems of payment E-trade, etc.
5. Chapter 4 "Stress-test of the banking system": this chapter evaluates the degree of solidity of banking system on the basis of micro and macro stress tests. After the identification of the vulnerabilities or risks weighing on financial stability, the stresses tests banking and the macro stress tests will allow to formulate a judgment on the degree of impact strength of the financial system.
6. Appendices: this part is devoted to specific questions having for objective to facilitate the comprehension of analyzes carried out in the heart of the report. The Central banks use this part in heterogeneous ways; there are of them those which present the last evolutions financial regulation. Other Central banks devote this part to the items of research, prepared by economists of the Bank or external authors, on questions related to financial stability.

The structure suggested analyzes the whole of the components of the financial system and makes it possible to formulate a total judgment on the situation of financial system. However, it has to evolve/move according to the economic conditions and financial. Also, the Bank will be able to be focused in a forthcoming stage on particular components or specific risks.

In addition, the financial stability report of a central bank must imperatively respect some basic principles. First of all, it must make it possible to the reader to determine the systemic risks through a clear analysis and an articulation of the various parts of the report. Also, the structure of the FSR must be standardized in order to facilitate to the final reader the follow-up of the situation of the financial system and the judgments of the monetary authorities. With regard to the other characteristics of the report to knowing its frequency and its availability, following the example majority of the central banks, it would be convenient to adopt a semi-annual publication and to be committed on a time-table of diffusion in order to allowing a better regularity in the publication of the FSR. The central bank should devote a distinct heading on its official site for the communications as regards financial stability in order to avoid any overlapping with its other missions. The publication should relate to at the same time the FSR and the data used, except for those in confidential matter (like the individual data).

WHICH INDICATORS TO USE?

The indicators used within the framework of the RSF result from the macroeconomic and micro-prudential analysis and aim at covering dimensions having milked with financial stability. Indeed, the macroeconomic indicators, used in the report on the monetary policy, are included in the FSR in order to identify the areas of vulnerability and to describe the risks weighing on the stability of the financial system. In the same way, the micro-prudential indicators, employees in the reports of supervision, are often included in the FSR in order to evaluate the systemic and no-individual aspects.

Since the Nineties, where first missions FSAP (Financial System Assessment Program) were initiated, the IMF proposed, in answer for the purposes of the banking crises of the Eighties and Nineties, of the indicators of financial solidity (Financial Soundness Indicators, FSI) capable to approach the financial risks and banking weighing on financial stability. Initially, the IMF recommended to follow basic indicators (Core Indicators) including/understanding the statistics on quality, the solvency and the performance of the institutions of deposits and in the second time, to widen the device of follow-up to other advanced indicators (encouraged indicators) including specific data on the institutions of deposits, the households, not – financial firms, the nonbanking markets and financial institutions.

On the same register, the ECB proposed in 2005 an alternative approach based on macro-prudential indicators (Macro Prudential Indicators, MPI) in order to evaluate financial stability as a whole. Compared to the indicators of the IMF, the indicators proposed by the ECB are more numerous and make it possible to follow several components of the financial and economic system (Mörttinen and Al (2006)). Nevertheless, put besides some marginal differences, the two approaches use overall the same indicators of risk.

Except the Euro area which uses its own macro-prudential indicators, the majority of the countries use the standard approach of the IMF. Indeed, the central banks publish in the RSF on average 53% of “Core” FSI gathering the indicators of solvency, of quality of the assets, profitability, liquidity and market. Although the indicators of solvency, quality of the assets and profitability practically appear in all the RSF, those relating to the liquidity and the market risk are not frequently used. With regard to the advanced indicators, the FSR employ between 37% and 40%. Being the indicators treating of the nonbanking financial institutions the FSR use between 14% and 20% of the indicators proposed by the IMF (Haan and Al (2006)).

Simultaneously with the indicators of financial solidity, other specific indicators are used to describe the tensions on the markets of capital. The objective is to extract the relative

information with the risk contained in the financial assets, in particular the shares, the obligations and the options. Among these indicators appears: the volatility of the shares, the distance to the default, probability of default, the yield of sovereign bonds, the CDS premium, indicators of implicit volatility derived from the options and other derivative products.

In the same way, the central banks use other information, in quantitative and qualitative matter, resulting from the credit rating agencies, early warning systems or of the opinion polls on the financial system and its infrastructure. Indeed, many FSR bring back the last ratings of the financial institutions issued by Moody's, S&P and Fitch while insisting on the systemic securities of this notation. These notes make it possible to have an evaluation independent of the financial health of the institutions. In the same way, certain FSR restore the results of opinion polls in relation to the financial system, in particular the opinion of the actors of the financial market on the extent of the risks to which they are exposed and the investigation into the evolutions of the bank credit.

In the light of Benchmark, it arises that the central banks use overall the indicators proposed by the IMF and enrich them by other indicators suitable for inform about important dimensions as regards stability of the financial system. The indicators of risk, developed until now by the central banks, are overall on line with the practices of the central banks and the IMF. However, it is to be stressed that the relevance of the FSR does not depend solely on the quantity of indicators used, but rather of the quality of the analysis which the latter make it possible to offer. In this respect, the example of the Bank of England is interesting. Indeed, the report/ratio of BoE is composed of a panoply of economic indicators and financial covering the whole of the components of the financial system and economic. In addition to the indicators of financial solidity suggested by the IMF, other indicators the complementary such as CD sovereigns and banking, the raw material costs, the curve of the rates, the spreads of interest rate, implicit volatilities of the financial assets and the sovereign notations are used.

WHICH IS THE PLACE OF THE MACRO STRESS TESTS IN THE FSR?

The tests of resilience (stress tests) became essential analytical tools in the analysis and the evaluation of financial stability. They are used to measure the impact of an extreme and plausible shock on an institution or the financial system as a whole. These tools were used for the first time by the authorities of supervision on the level of the reports/ratios on the finance companies in order to evaluate the individual risks of the banking institutions and to formulate a judgment on the robustness of each institution.

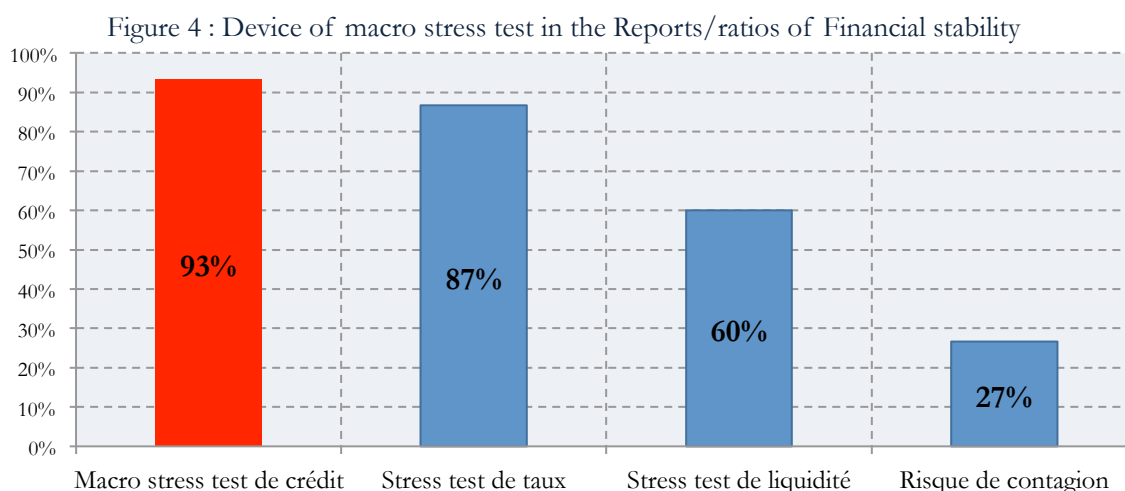
As from the Nineties and in first programs F.S.A.P, a new approach of stress test was adopted, they are the macroeconomic stress tests or the macro stresses tests. The latter make it possible to quantify the relation between the macroeconomic conditions and the evolution of the performance, the solvency and the liquidity of the individual institutions and the banking system and financier as a whole (macro-financial linkages). They thus make it possible to provide a comprehensive framework of discussion on the macroeconomic risks incurred by the financial system and to measure the impact of it, in the event of materialization, on its impact strength.

Two approaches of macro stress test are used at the level them FSR in order to quantify the impact of the macroeconomic conditions on financial equilibrium. The first approach consists in identifying the plausible shocks and extremes which can affect the financial system and ask the financial institutions to lead them on the basis of their own internal model (Bottom-up approach). The second approach is based on an internal design of the macro stresses tests: within this framework, the Central banks use their own tools to evaluate the robustness of the

financial system as for the macroeconomic shocks (approach Top-down). In the facts, and although the central banks often choose to adopt an approach Top-down with the detriment of the Bottom-up approach a stepping of the results of both approaches is necessary to arrive at relevant conclusions.

The exercise of macro stress test within the framework of the approach Signal-down proceeds in 5 stages: determination of the initial shocks, the simulation of the macroeconomic conditions by taking account of the shocks, identification of the banking wallet to stress, the modeling of the relation between fundamental macroeconomic and financial ones and the formulation of a judgment as for the solidity of the banking sector

After does the identification of the scenarios to be used in the exercise of the macro stress test, it is necessary to determine the banking book to stress, act of the banking book or the market book? This choice is justified by the structure of the balance-sheet of the banking system and its sources of margin. Have regard to the role of the banking system in the financing of the economy and the preponderance of the wallet of credit, the credit risk collected all the attention of the central banks and the macro stresses tests of credit were used (Figure 4).



The macro stresses tests of credit are thus retained on the level of the RSF of the majority of the Central banks in order to describe the relation between the evolutions of the macroeconomic framework and the variables banking and financial. The models of systemic risk of credit are varied and the specifications retained by the Central banks depend on the characteristics of each country, of the level of development of the banking system and the nature of the available data (see Tableau 3).

Tableau 3 : devices of macro stress test of credit of the central banks communicated on the level of the RSF

Experiments RSF	Endogenous variables	Model	Methodology of simulation of the scenarii	Variables of interest
Chile	Ratio of provisions, growth rate of the GDP, interest rate and debt	Time series (VECM)	Model VECM	Solvency ratio
Slovenia	NPL, interest rate, GDP and foreign exchange rate	Time series (VECM)	Model VECM	Solvency ratio
Czech	New NonPowerful Loan (NPL), GDP, inflation and interest rate	Model of Merton	macroeconomic model	Rate of defect
Austria	Rate of industrial defect, oil price, income available, rate of inflation, export, industrial production and interest rate	(Regression logistics)	Model VAR	Distribution of the hoped and unhoped-for Losses
Belgium	Rate of defect of the firms, output gap, interest rate	(Logistic Regression)	Macroeconomic model NIGEM	Rate of defect of the firms

Germany	Logistic transformation of the rate of the provisions, GDP, interest rate and growth of the appropriations	Data of panel	Macroeconomic model	Provisions
ECB	Frequency of the hoped defects, GDP, inflation, assets price, foreign exchange rate and interest rate	Satellite model	Model GVAR with several Convention countries	Frequencies of the defects hoped
France	Probability of change of notation, variables macroeconomic	(Logistic Regression)	Model Mascot	Solvency ratio

*** This table was elaborate on the basis of FSR of the Central banks**

The results of these models as well as the assumptions retained for the exercise of macro stress test are often communicated in the financial stability report. However, the practice of the Central banks shows clearly that the information communicated on the level of the parts dedicated to the macro stress test is varied and often depends on specificities of each country and the degree of transparency wished. Table 4 represents the information communicated by several Central banks within the framework of the macro stress test of credit.

Tableau 4 : Practices of macro stress of credit at some Central banks

Central banks	Scenarios	Stressed risk factor	Percentage allocated in the FSR	Variables of interest
Central Bank of Japan	Two scenarios: basic and an extreme scenario using a model VAR	Growth rate of the GDP, the market index TOPIX, interest rate of long run	12%	Credit costs, Ratio Tier 1
Central Bank of England	Two scenarios: basic and an extreme scenario using a model BVAR	Growth rate of the GDP, price index of the real assets, unemployment rate, interest rate of short and long terms	-	Banking profit and solvency ratio
Bundesbank	Two scenarios: basic and an extreme scenario	Growth rate of the GDP, interest rate of short and long terms and the curve of the rates	8%	Net interest margin, other incomes banking, ROA and ratio Tier 1
Czech Central Bank	Two scenarios: basic and an extreme scenario (the extreme scenario is divided into three scenarios alternate) by using the forecasting models of the Bank	Growth rate of the GDP, unemployment rate, foreign exchange rate and interest rate at one year	7%	Amounts receivable in suffering and the solvency ratio
Central Bank of Brazil	An extreme scenario	Growth rate of the GDP, interest rate and foreign exchange rate	2%	Amounts receivable in suffering and the solvency ratio
Central Bank of India	A basic scenario and three scenarios unfavorable (weak, average and extreme) based on a historical approach	Growth rate of the GDP, Interest rate of short term, rate of inflation, ratio of exports with the GDP and rate of inflation	3%	Amounts receivable in suffering and the solvency ratio
Central Bank of Hungary	Two scenarios: basic and an extreme scenario	Growth rate of the GDP, real Foreign exchange rates, Spread CD, Unemployment rates, Assets prices	7%	Losses on amounts receivable and solvency ratio
Central Bank of Sweden	Two scenarios: basic and an extreme scenario resulting from the scenarios used by the European Banking Authority (EBA)	Growth rate of the GDP and interest rate	4%	Profit and solvency ratio

*** This table was elaborate on the basis of FSR of the Central banks of the years 2010,2011 and 2012**

The international experiment shows thus that the losses on amounts receivable and the solvency ratios are often used, as variable of answer, to evaluate the stability of the banking system, following the advent of macroeconomic shocks. Moreover, the part allocated with the macro stresses tests in the RSF is between 2 and 12% of the aforesaid reports/ratios, without taking account of framed and the appendices which contain in the majority of the cases of the items of research and the notes detailing the systemic models of risks used within the framework of the macro stress test.

As regards communication, the results of the macro stresses tests can be paid in an aggregate or granular way. The countries choosing more transparency choose to give information by bank or segment of banks (Latvia, Brazil, Spain and the United States). These central banks consider that the diffusion of sensitive information is certainly suitable for induce financial instability, nevertheless, it can on the contrary encourage the establishments with more a greatest caution and push the central bank to improve its decision making and thus to reinforce its independence and its credibility.

Currently the majority of the Banks have a device of stress test and macro stress test aligned on the international standards. Indeed, the systemic models of risks of credit and profitability will make it possible to ensure a rather satisfactory communication as regards macro stress test. In the same way, with the level of the micro stress tests the central banks have a framework of stress test of liquidity and rather advanced interest rate thus making it possible to formulate a judgment on the degree of sensitivity of the Moroccan banks an evolution of interest rates or a change in the behaviors of the depositors.

CONCLUSION

The widening of the missions of the central banks to the maintenance of stability requires an effective communication strategy making it possible to anchor anticipations of the agents and to sensitize them as for the risks incurred by the financial system. This strategy will have to inform and reassure the public as for the areas of vulnerabilities and with the macro-prudential policies to implement, in order to limit the systemic risks.

The FSR is the principal channel of communication as regards financial stability. Its production as its structure are conditioned by several elements, namely, the maturity of the framework analytical, the structure of the financial system and the international level of integration at financial market and economic system. The practices of the central banks on the matter are heterogeneous and it seems difficult to reach a consensus from them. Certain very advanced report are interested in the unit of the components of the financial system and economic whereas others are limited to some components of the financial system, in particular, the banking system.

The analysis carried out in this work shows that the majority of the countries articulate their report around five great parts: (I) macro-financial environment, (II) the real sector, (III) financial intermediaries, markets of capital and infrastructures, (iv) the stresses test and macro stress test and (v) items and documents of research. The first three parts are intended to describe and identify the economic and financial vulnerabilities incurred by the financial system. The fourth part evaluates the impact strength of the financial system in the event of materialization of the possible hazards. Lastly, the last part, of general order, is intended to produce and share some reflections on problems related to financial stability.

As regards indicators to be communicated on the level of the FSR, the central bank could be limited to the indicators suggested by the IMF and some indicators resulting from the markets of capital. Most important is to use indicators allowing to give an overall assessment of each component of the financial system and to facilitate the evaluation of the transverse risks. With regard to the stresses tests and macro stress tests, the banks can communicate the results on the banking system in an aggregate way in order to reassure the public as for the impact strength of the financial system.

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Organizational Climate and Oil Companies. Multidimensional Study with Workers from the Drilling Department in Tabasco, Mexico

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Abstract

The organizational climate is the perception of workers in a company about the processes of the organization and the relationships among its members. The aim of this study was to conduct a study of organizational climate to employees working in an oil company located in Tabasco, Mexico. The research is descriptive and correlational. The design is non-experimental with a quantitative approach. A questionnaire with a Likert scale and reliability of 0.838 in the Cronbach Alpha coefficient was used. The dimensions of organizational climate were autonomy, cohesion, support, work pressure and innovation. The ANOVA analysis of variance reported a statistically significant difference between cohesion and employment status; autonomy and work area. The Pearson correlation indicated a weak correlation between the category of worker and the dimension of autonomy. In conclusion, the results indicate a favorable trend toward organizational climate.

Keywords: Organizational climate, cohesion, work pressure, oil workers, drilling.

INTRODUCTION

At present, the diversity of organizations that exist in Mexico need to face new and greater challenges in order to be competitive in the field to be developed; given this reality, the human capital of each organization becomes a fundamental pillar for the achievement of its objectives.

Every organization has a work environment that is perceived and experienced by the members thereof, and considers the feel and react of each individual. This environment somehow affects the performance of employees in the organization; the relationship between the worker and his environment can provide satisfactory results, or conversely, can cause problems not only in the performance of his work, but also personally. In this sense, Werther, Davis and Guzmán (2014) argue that the deterioration of the work environment causes staff to lose enthusiasm for their work, and this is reflected not only in higher levels of absenteeism and turnover rates, but also in the slowness, reluctance and indifference that characterize the sclerotic institutions; the staff start to psychologically drift apart from their work and dedicate to meet the minimum required.

In this regard, Chiavenato (2011) indicates that the organizational climate is closely related to the motivation of its members; when it is high, the organizational climate increases and results in

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satisfying relationships, encouragement, interest, collaboration, etc., on the contrary, when motivation is low among the members, either due to frustration or barriers to satisfy needs, the organizational climate tends to decrease and is characterized by depression states, indifference, apathy, dissatisfaction, and so on. The author adds that in extreme cases, it occurs due to states of aggression and dissatisfaction that are common in the frontal clashes with the organization such as strikes or demonstrations.

The problems of people have been the most difficult to resolve, and also those that absorb the most time to administrators. In order to address these problems, it is recommended that administrators understand the perceptions of employees regarding different aspects of the organization. Besides, they must know as much as they can about the factors that significantly influence the behavior of people in their organization. One of these factors is the organizational climate, that is, the psychological atmosphere of all departments in an organization (Furnham, 2001).

Werther and Davis (2008) associate the organizational climate with quality of life at work when they say that this quality is achieved "by improving the work environment, creating a favorable working environment to the company, and at the same time conducive to sustainable, healthy and comprehensive development of the productive life of the workers "(p. 427). Similarly, Davis and Newstrom (2003) mention that the term quality of life at work refers to the favorable or unfavorable nature of the working environment in its entirety for people, and also that companies recognize their responsibility to create jobs and excellent working conditions for individuals and for the economic welfare of the organization.

The quality of the work environment is determined by the way the staff judge their own activity in the organization, although humans produce variable results when they decide to provide services. Studies on the subject over the past two decades reveal two important aspects: 1) in order to increase productivity, it is essential to improve the quality of the working environment and 2) most people think that they enjoy a high-level working environment when they contribute to the success of the company in any significant way (Wether, Davis and Guzmán 2014). In this way, "both leaders of the company and professionals in human capital management must unite to create an organizational climate in which people are treated as such and as experts responsible for their posts" (Wether, et al. 2014, p. 309).

When talking about organizational climate, Brunet (2011) points out that in these times, it is very important for organizations to identify, meet and consider the elements governing the working environment of its members in their work area and throughout the organization. He also mentions that at the present time, it is necessary to understand the factors that influence the performance of individuals at work.

Organizational climate studies are relevant for organizations, since managers need to have accurate and timely information in order to develop strategies that allow them to involve and engage employees from their organization in the enhancement of organizational processes, as well as in their individual productivity, which results in the increase of the competitiveness of the company.

The purpose of this research was to determine the perception of organizational climate of employees working in the drilling department in a company dedicated to the exploration, distribution and commercialization of crude and refined oil in Tabasco, Mexico. It was created in response to the problem of staff absenteeism that the company is facing in this area. If these absences are not covered on time, there is a risk that the activities could be suspended, and thus a decrease in oil production and important economic losses. Given this situation, it is necessary to determine the existence of a favorable or unfavorable organizational climate for the activities of this organization. It is important to note that no history of previous studies of organizational climate in Mexican oil companies was found in the literature consulted, so this research can be considered a pioneer in this type of institution.

THE ORGANIZATIONAL CLIMATE

Origin of the construct

The concept of organizational climate is rooted in the thirties. It emerged with the Hawthorne studies at Western Electric and the current of human relationships that capitalizes the discovery of the socio-emotional dimension of the organization, relates it to the notion of leadership and associates it with the organization conceived as structure (Fernández, 2004). In this vein, Lewin (1951); Lewin, Lippit and White (1939, quoted by Salgado, Remeseiro and Iglesias, 1996) point out that the development of the concept of social climate and its research began in the early thirties with the research conducted by Lewin and his associates; it is the Lewin's work (1935, 1939, 1951) which serves as a stimulus for the development of interest in the social context, his experimental laboratory work with Lippit and White on group leadership styles, introduces the term 'climate' as a link between the person and the environment, the group will behave differently depending on the behaviors of the leaders, creating thus different climates (Silva, 1992).

On the other hand, Mújica de González (2007) indicates that the term organizational climate was raised from the sixties with the emergence of organizational behavior, organizational development and the theory of systems applied to the study of the organizations, and adds that the analysis of the organizational climate consists of a set of factors expressed in terms of components, dimensions, categories and variables that enable its study, according to research purposes.

Brunet (2011) states that the concept of organizational climate is recent and was first introduced in industrial/organizational psychology by Gellerman in 1960, and that the theoretical origins are not always clear in the research; he also mentions that the concept of climate is made up of two schools of thought, Gestalt's school and the functionalist school; the first one takes the position through which individuals understand the world around them based on perceived and inferred criteria, and that these behave according to how they see the world, so that the perception of the working environment or the environment itself is what influences the behavior of an employee. The functionalist school states that the thinking and behavior of an individual depend on the environment around them, and individual differences play an important role in the individual's adaptation to his environment, so that an employee interacts with his environment and participates in the determination of this climate.

Concept

The organizational climate has been conceptualized by different authors, such as Alves (2000) who defines it as the result of the perception that workers have about an objective reality that is the organization; what workers live and feel for a particular organization. Furnham (2001) claims that the organizational climate can be considered a descriptor of organizational

attributes, expressed in terms that characterize individual experiences with the organization. For Sandoval (2004, p. 84), the organizational climate "is the work environment perceived by members of the organization and includes a structure, a style of leadership, communication, motivation and rewards, which all directly influence the behavior and performance of individuals."

Downey, Hellriegel, Phelps and Slocum (1974) state that the organizational climate is a set of attributes that can be perceived by the individual about a particular organization or their components, and may be induced by the way the organization and/or its components deal with its members and their environment.

Chiavenato (2011) expresses that the organizational climate is the internal environment among the members of the organization and that it is closely related to their motivation, he also adds that it refers to the motivational properties of the organizational environment, as well as the aspects of the organization that lead to stimulation of different types of motivations in their members, and the organizational climate is favorable when it boosts morale and meets the personal needs of the members; and it is unfavorable when it frustrates those needs. Mújica de González (2007) perceives the organizational climate as a set of shared perceptions that people gain about the reality of work in the organization, where social components (policies, rules, regulations, role playing, operation of groups and structural) combine.

The definitions of organizational climate refer to the way how people perceive the surrounding environment of the organizations in which they interact (Castillo, Lengua and Pérez, 2011; Segredo and Díaz, 2011; Mújica de González, 2007; Watkin and Hubbard, 2003; Sandoval, 2004; Alves, 2000; Brunet, 2011; Downey, et al 1974) these perceptions are related to external and internal factors that are found within the personal and institutional dimensions of the company, which are considered within the strategic importance for the organizations, perceived as a fortress in quality processes and continuous improvement (Segredo, et al. 2011).

Martín (2000) argues that the working environment in organizations is a facilitator, as well as a result of numerous interactions and organizational processes including planning with all its instruments and components, considering the human element, communication, participation, trust and respect. In this regard, Alves (2000, p. 124) states that "A high level of communication, mutual respect, feelings of belonging, friendly atmosphere, mutual acceptance and encouragement, along with a general feeling of satisfaction are some of the factors that lead straight to a favorable climate, proper productivity and good performance."

The organizational climate has been associated in various studies with variables such as job satisfaction (Downey et al 1974. Salgado et al 1996; Robles, et al 2005; Chiang, Salazar and Núñez, 2007; Chiang, Salazar, Huerta and Núñez, 2008) leadership (Alves, 2000; Gonzalez Parra, 2008; Contreras, et al 2009) the culture of the organization (Méndez Hernández and Vargas, 2013, González et al, 2008) with the quality of service and quality of life at work (Bernal, Pedraza and Sánchez, 2015; Casas, Repullo, Lorenzo and Cañas, 2002). Studies have reported that organizational climate is a variable that relates to other variables interacting in the context of the organization.

METHODOLOGY

Type and design of the research

The research was descriptive and correlational, due to the fact that the aim of this study was not to modify the study variables, but only seek to determine the perception of workers in the

oil company regarding their work environment, as well as establish the relationship between the dimensions of organizational climate with sociodemographic variables. The ANOVA analysis of variance was used in order to determine the existence of statistically significant differences between the organizational climate and the variables of employment status, work area, marital status, age, category at work and seniority in their current category.

The design is transversal with quantitative approach. This study is not experimental because the research was conducted in the natural context where workers perform their working hours, that is, they were not exposed to different conditions than those in which they perform their work.

Population and sample

The population is made up of 198 workers; a simple random sampling method with a 95% confidence and 5% error level (Walpole, Myers, Myers and Ye, 2007) was used. The sample consisted of 131 subjects, though it was only possible to apply the instrument to 120 workers due to some restrictions on the access to the drilling department.

In respect of gender, all the workers are men; with regard to marital status, 105 are married and 15 are single; in terms of age, 12 are reported to be under the age of 30; 43 are between 31 and 40; 43 are between 41 and 50; and 22 are older than 50 years old. Regarding the work area to which they belong, 89 of them mentioned to be in operation and 31 in maintenance. Concerning the category they hold in the company, the results showed that one of them is a technical drilling inspector, 12 are drillers, 14 are drilling assistants (on supervision and other activities), 16 are drilling assistants (on maneuvers in heights), 32 are drilling assistants (on maneuvers on the floor), 7 are operators of auxiliary equipment, 9 are assistants on drilling works, 4 are in charge of technical maintenance "A", 4 are in charge of mechanical maintenance, 5 are in charge of electrical maintenance, 3 are in charge of welding maintenance, 3 are assistants in mechanical maintenance, 5 are assistants in electrical maintenance, and 5 are assistants in welding maintenance. Regarding the time they have worked in this category, 27 indicated that between one and three years, 52 between three and six years, 17 between six and nine years, 11 between nine and 12 years and 13 over 12 years old.

In relation to the situation regarding their employment contract, 33 said they are stable workers, 46 said they are in promotion to a higher level post and 41 said they are in a transitional post. Concerning the time they have worked in drilling, 2 workers said they have worked for less than a year, 23 between 1 and 5 years, 47 between 5 and 10 years, 23 between 10 and 15 years and 25 over 15 years.

Research instrument

To conduct this study, an adaptation of the questionnaire of organizational climate by Chiang, et al. (2008) was made. The first part of the instrument was in relation to sociodemographic variables; five of them were included in relation to the organization: work area, category (post), time working in that category, employment status (stable, in promotion or transitional) and seniority; two sociodemographic variables regarding the individual were added: age and marital status.

The second part of the questionnaire measured the organizational climate through 5 dimensions (Table 1). It was structured in a Likert scale with five response options where 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree. In

this way, to agree and strongly agree represent a favorable climate; in the case of work pressure, to strongly disagree and disagree indicate the absence of this dimension.

Table 1. Specifications of the dimensions of the organizational climate

Dimension	Operational definition
Autonomy	The perception of the worker about the self-determination and responsibility required in decision-making concerning work procedures, goals and priorities.
Cohesion	The perception of relations among the workers in the organization, the existence of a friendly atmosphere of trust and proportion of material assistance in the performance of tasks.
Support	The perception of the members on backing and tolerance in behavior in the institution, this includes learning from mistakes made by the employee, without any fear of retaliation from their superiors or co-workers.
Work pressure	Feelings of tension perceived by workers caused by overwork.
Innovation	The perception of the courage to take risks, be creative and take on new areas of work in which he has little or no experience.

Source: Chiang et al. (2008).

The reliability of the instrument was measured through the calculation of the Cronbach Alpha Coefficient, which reported a value of .838, which in general terms is considered acceptable (Hernández et al. 2006).

Data collection and analysis

The questionnaires were handed out to workers in sealed envelopes in the place of departure toward the drilling equipment, providing a brief explanation and emphasizing the anonymity of those who responded to the survey, in order to provide confidence and get accuracy in the answers.

RESULTS

The organizational climate was analyzed in order to establish the way how employees perceive it. For the total average of the responses, a sum of each of the replies to the questionnaire items was made. The scores obtained on the scale were examined, in the first place, through the distribution of frequencies in which there is a normal distribution with a minimum recorded value of 23 and a maximum value of 99, a kurtosis of 2.018, an average of 71 and a standard deviation of 11.18 over a general scale of 20-100 points corresponding to the sum of all responses for each question in the questionnaire. Quartiles of the distribution were identified and categories presented in Table 2 were obtained.

Table 2. Levels of acceptance of organizational climate, range of values (20-100)

Organizational climate	Percentile	Range	%
Perception of unfavorable organizational climate	25	Values ≤ 63	25.8
Perception of moderately favorable organizational climate	50	64 – 72	25.8
Perception of favorable organizational climate	75	73 – 78	26.7
Perception of highly favorable organizational climate	100	Values ≥ 79	21.7

Source: Own elaboration.

Only the population registered below the percentile 25 (25.8%) as indicated in Table 2 was considered, in order to establish a more accurate criterion for the population that is believed to perceive an unfavorable organizational climate.

The result of the descriptive statistics is presented in the Table 3 by dimensions of organizational climate.

Table 3. Statistical descriptions of the dimensions of the organizational climate

Dimensions	N	Minimum	Maximum	Average	Standard deviation
Autonomy	120	4	20	14.61	3.344
Cohesion	120	4	20	15.73	3.193
Support	120	4	20	15.01	4.174
Work pressure	120	4	20	11.88	3.435
Innovation	120	4	20	13.86	3.520
Valid N (by list)	120				

Source: Own elaboration.

It is noted that the dimension of cohesion has the highest average (15.73), which indicates that individuals in this organization not only help and respect each other, but also support each other on work activities, and also there is a spirit of teamwork. In the same way, the dimensions of support (15.01) and autonomy (14.61) indicate a favorable organizational climate; according to the responses to items related to these factors, the employees feel they can count on the help of their boss when they need it, and also feel motivated and supported by him; they feel they can decide on the organization and the working methods as well, and also feel free to propose further activities related to the work they do. It can be inferred from the dimension of innovation (13.86) that the organizational climate is moderately favorable, the questions in this area were aimed at asking them the extent to which their boss encourages them to develop their own ideas and improve the ways of doing the activities. In addition, no work pressure was found in the subjects of study.

For the purpose of determining the existence of statistically significant differences between the dimensions of organizational climate in relation to sociodemographic variables, the ANOVA analysis of variance was used in order to analyze age, marital status, work area, category in the post, seniority in the category, employment status (temporary and stable) and seniority in the drilling department. The results are given below.

Table 4 shows the existence of a statistically significant difference in the dimension of cohesion regarding the employment status of workers in which, according to the results of the averages, those who are promoted to a higher level post perceive the organizational climate to be more favorable, whereas those in the stable post perceive it to be less favorable.

Table 4. Comparison of the population averages of the dimensions of the organizational climate in relation to the employment status of workers

Dimension	Employment Status	N	Average	Standard deviation	F	Sig.
Autonomy	Stable post	33	15.48	3.465	1.727	0.182
	Promotion	46	14.46	3.111		

	Transitional	41	14.07	3.438		
	Total	120	14.61	3.344		
	Stable post	33	14.61	3.691		
Cohesion	Promotion	46	16.43	2.934	3.32	.040*
	Transitional	41	15.85	2.851		
	Total	120	15.73	3.193		
	Stable post	33	14.24	4.63		
Support	Promotion	46	15.91	3.626	1.849	0.162
	Transitional	41	14.61	4.277		
	Total	120	15.01	4.174		
	Stable post	33	12.39	2.999		
Work pressure	Promotion	46	11.28	3.769	1.849	0.162
	Transitional	41	12.15	3.351		
	Total	120	11.88	3.435		
	Stable post	33	13.88	4.278		
Innovation	Promotion	46	14.39	3.187	1.192	0.307
	Transitional	41	13.24	3.176		
	Total	120	13.86	3.52		

*Note: *p ≤ .05 Source: Own elaboration*

The existence of a statistically significant difference in the dimension of autonomy regarding the work area was determined; the average shows that maintenance workers perceive the organizational climate to be more favorable, whereas operational workers perceive it to be less favorable (Table 5).

Table 5. Comparison of the population averages of the dimensions of the organizational climate in relation to the work area

Dimension	Work área	N	Average	Standard deviation	F	Sig.
	Operation	89	14.20	3.351		
Autonomy	Maintenance	31	15.77	3.084	5.263	.024*
	Total	120	14.61	3.344		
	Operation	89	15.93	3.014		
Cohesion	Maintenance	31	15.16	3.652	1.345	.248
	Total	120	15.73	3.193		
	Operation	89	14.93	4.374		
Support	Maintenance	31	15.23	3.594	.113	.738
	Total	120	15.01	4.174		
	Operation	89	11.83	3.597		
Work pressure	Maintenance	31	12.03	2.972	.078	.781

	Total	120	11.88	3.435		
	Operation	89	13.97	3.342		
Innovation	Maintenance	31	13.55	4.032	.322	.571
	Total	120	13.86	3.520		

Note: *p ≤ .05 Source: Own elaboration.

The ANOVA analysis of variance reported no existence of statistically significant differences between the organizational climate and the marital status of workers, age, and category of worker, seniority in their current category, and seniority in the drilling area.

No correlations between age and the dimensions of the organizational climate were found when performing the analysis of correlation of the dimensions of the organizational climate with the worker's age, job category, and seniority in the category (Table 6). However, a weak positive correlation between the category of the worker and the time they have worked in the job category with the dimension of autonomy was identified, which means that the higher the job category and the permanence in the category, the more sense of autonomy the workers show to perform their tasks. No correlations between these demographic variables and the other dimensions of the organizational climate were found.

Table 6. Correlation of the dimensions of the organizational climate with workers' age, category, and seniority in the category

	Age	Category	Seniority (category)	Autonomy	Cohesion	Support	Work pressure	Innovation
Age	1	.214*	.358**	.131	-.075	-.041	-.057	-.027
Category		1	-.053	.200*	-.071	-.057	.091	-.074
Seniority(category)			1	.180*	-.035	-.153	.026	-.078
Autonomy				1	.132	.066	.190*	.204*
Cohesion					1	.521**	.061	.503**
Support						1	-.030	.668**
Work pressure							1	.183*
Innovation								1

*. The correlation is significant in level 0, 05.

**.. The correlation is significant in level 0, 01.

Source: Own elaboration.

CONCLUSION

Organizational climate studies provide information about the perceptions of individuals in relation to the interactions among their members and the organizational processes. The results obtained in this research indicate a favorable organizational climate in the dimensions of cohesion, support from managers toward workers, autonomy and work pressure; moderately favorable for the dimension of innovation; the results did not report a very favorable organizational climate in the oil company involved in the present investigation, due to the fact that none of the answers were found to be in the item number 5, which represents the absence of a very favorable working environment in the company. It is thus recommended that close attention should be paid to the maintenance and enhancement of the organizational climate.

The ANOVA analysis of variance reported no existence of statistically significant differences between the organizational climate and the marital status, age, category of worker, seniority in their current category, and seniority in the drilling area. Therefore, these variables do not influence the perception of workers about the organizational climate.

On the other hand, a statistically significant difference in the work area to which they belong and the dimension of autonomy was found, the average indicated that maintenance workers perceive the organizational climate to be more favorable, whereas operational workers perceive it to be less favorable. This result acts as a model for future qualitative research to identify the causes of this result. Also, a statistically significant difference between the employment status and the dimension of cohesion was found, in which those who are promoted to a higher level post perceive more mutual support, respect and spirit of teamwork; it is inferred that this is a logical result, since they are promoted to a higher post, but still remains open to future research in the organization. The Pearson correlation analysis reported only a weak positive correlation between the category of worker and the seniority in the job category with the dimension of autonomy; this correlation cannot be considered as relevant despite the fact that it was found, since the numbers do not indicate a correlation as such.

It was not possible to make a comparison between the results obtained in the present study and other studies, due to the fact that, in the search for publications in scientific journals, no analysis of organizational climate in Mexican oil companies was found; only studies to obtain academic degrees in countries such as Ecuador and Costa Rica were found. This research is expected to open up the possibility of conducting further research on this subject in oil companies, by virtue of the importance of the organizations of this field in the economic and social development of Mexico.

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Key Determinants of Success to Achieve Sustainable Competitive Advantage (SCA)

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Abstract

The purpose of this study is to detect the relationship among sustainable competitive advantage (SCA) and key factors affecting it, such as knowledge based view (KBV), resource based view (RBV), dynamic capability (DC) and core competencies (CC). A quantitative methodology is adopted to develop a model, and hypotheses are stated to examine the proposed relationship between the components of banking industry. A highly structured questionnaire is developed and distributed among a sample of 150 managers, specialists and consultants of bank. With a response rate of 81.3 percent, 122 questionnaires are returned; the number of valid and usable questionnaires was 101. The content validity and Cronbach's alpha was used to determine validity and reliability of questionnaire, respectively. Structural equation modeling is used to test the stated hypotheses and its model. A positive relation is found among KBV, RBV, DC, CC and SCA of Mellat Bank.

Keywords: competitive advantage, dynamic capability, resource based view, knowledge based view

INTRODUCTION

Sustainable competitive advantage has always been interesting issue in strategic management and businesses affairs. According to Porter (1985), cheap labors and natural resources are not good economy requirements. A competitive advantage is the ability obtained from resources and attributes that helps a firm to show better performance in similar industry or market than other competitors (Christensen and Fahey 1984, Kay 1994, Porter 1980 cited by Chacarbaghi and Lynch 1999). According to Barreny (1991), RBV is one of the most superior approaches to attain high levels of competitive advantage, leading to better performance through unique values which are creating a strategy that any other current or potential competitor is unable to imitate or imply it simultaneously; the used strategy cannot be duplicated for long period of time. It is suggested that resources which are tangible assets, intangible assets and capabilities, have the potential to provide firms with a sustainable competitive advantage (Barney, 1991). One of the main issues for managers to focus on is the restructuring organizational management to effectively promote the organizational knowledge. The pros argue that since knowledge based resources are usually difficult to imitate and socially complex, heterogeneous knowledge bases and capabilities among firms are the major determinants of sustained competitive advantage and superior corporate performance. As it seems, knowledge based view is a subset of source-based view, but in this challenging and changing time the source based view is considered as necessary and vital that requires to be analyzed in a single wide

area. Defining dynamic capabilities view, the explanation of both views might be more tangible, because in new theories, dynamic capabilities view is considered as complementary of knowledge-based and source-based view.

Dynamic capabilities were first put forward by Teece et al. (1997) to explain the sources and methods of creation and captured by firms operating in rapid technological changing environments. Teece (2007) argued if the capabilities were tangible, they would be best applied. Dynamic capabilities analyze competitive advantage and performance in high speed and dynamically changing markets (Easterby and Smithetal, 2009). A competency is the capability to apply or use a set of related knowledge, skills, and abilities required to successfully perform tasks in a work setting as well as potential measurement criteria for assessing competency attainment.

However, in a further step the organization achieve different functional characteristics with combination of abilities and during activities, so that certain distinctions appear between organization to show competency of enterprises; when this competency lead to performance of enterprise beyond the industry average, values offered to customers be higher than the customer's cost, and suggestions of organization be more attractive than competitors from view point of customers, the organizations will achieve competition advantages. To dominate dynamic capabilities in organization, the concepts, elements and its sub-branches should be recognized and applied; the important one of them are source-based and knowledge-based view, both of which targeted organization resources, and with deep approach try to change it to organizational merit. Finally, concentrating acquired merits and applying them in accurate way, a sustainable competition advantage can be created for organization. Figure 1 indicates this process.



Fig. 1. Acquisition steps of Sustainable Competitive Advantage

LITERATURE REVIEW AND HYPOTHESES

In recent competitive economy era, the managerial debate on strategic management appears to reach a crucial stage. The industrial organization viewpoint is applied to the economic theory regarding the external model of industries and builds a set of economic theories that describe, explain and attempt to predict the nature of a firm in terms of its existence, behavior, structure and its relationship with the market. In strategic management the traditional model of industrial organization is criticized by the upholders of the theories that regard the resources and competencies of a firm as its principal sources of competitive advantage. One of the most recent and controversial studies pertaining to corporate strategy is known as the resource-based view (RBV). The RBV as a basis for the competitive advantage of a firm lies primarily in the application of a bundle of valuable and tangible or intangible resources at the firm disposal. The RBV shows the accumulation of valuable, rare, inimitable and no substitutable resources is the basis of enterprise competitiveness and economic rent (Barney, 1986; Dierickx & Cool,

1989; Peteraf, 1993). Generally, RBV argues valuable, rare, inimitable, and non-substitutable (VRIN) resources are sources of competitive advantage (Barney, 1991). Valuable resources must enable an organization to engage a value creating strategy by either reduce its own weaknesses or superiority over its competitors (Villalonga and Amit, 2006). Newbert (2007) indicates that VRIN resources are related to capability and the capability is related to competence and the competence is related to competitive advantage. RBV should focus on the ability of the organization to sustain a combination of resources that competitors cannot possess or built up in a homological way. Any organization should in depth analyze ways to avoid imitation of their resources in order to reach capability. Finally, five resource based view dimensions including tangible assets, intangible assets, executive capability, human resource capability, and management capability were evaluated in this study.

One of the most important organizational resources is knowledge. Drucker (1993) predicted that competitive advantage in the future would be determined by knowledge resources, or what is known as knowledge workers. Consequently, both scholars and practitioners have increasingly paid great attention to an organization's ability to identify, capture, create, share or accumulate knowledge (Jang, Hong, Bock, & Kim, 2002; Kogut & Zander, 1996; Michailova & Husted, 2003; Nonaka & Takeuchi, 1995). Many researchers pointed out that knowledge would replace equipment, capital, materials and labor to become the most important element in production. However, there is no agreement among researchers about the definition of knowledge. Davenport et al. (1998) defined knowledge as "information combined with experience, context, interpretation and reflection that is ready to apply in decisions and actions." Marakas (1999) agreed that knowledge is an organized combination of ideas, rules, procedures, and information. Zeleny (2005) argues knowledge encompasses human feedback and collaborative learning. Knowledge can fall into different aspects depending on the organizational context or its under-area under; for example, technical knowledge, customer related knowledge, and product related knowledge or managerial knowledge (Barchan, 1998; Rowley, 2005; Tanriverdi, 2005, Massey et al., 2002; Collinson, 1999, Akroush 2010). Particularly in organizations the knowledge management method is very important. Knowledge management is thus a process of facilitating knowledge related activities, such as creation, capture, transformation, and use of knowledge. Knowledge management strategy has been argued to contribute to the generation of various organizational capabilities such as innovation which is vital to create an organization's capabilities and competences. Three knowledge based view dimensions including: empowering employees, promoting confidence, and coding rules focus were evaluated in this study.

Considering the existing descriptive and empirical literature, it is argued that organizational resources, or in other words, organizational KBV and RBV lead to the improvement of dynamic capability of organization. Therefore it is hypothesized that:

Hypothesis 1. There is a positive relationship between the organizational resources and its capability.

H1a. The higher the level of organizational KBV, the higher the level of Organizational DC.

H1b. The higher the level of organizational RBV, the higher the level of Organizational DC.

The strategic challenge for managers in high speed markets is to maintain sustainable competitive advantage for which dynamic capability provides such an advantage (Menon, 2008). Makadok (2001) and Kozlenkova, Samaha and Palmatier (2014) define capabilities as a special type of resource, specifically an organizationally non-transferable resource the purpose of which is to progress the productivity of the other resources possessed by the organization.

Winter (2003) claimed it in his work and even implied as the mystery and confusion surrounding the concept of dynamic capabilities. Actually, the dynamic capabilities analyze competitive advantage and performance in high speed and dynamically changing markets (Easterby & Smithetal, 2009). Managers must enhance their understanding of and explain organizational adaptive behavior in weathering the storm in the business environment resulting from the global financial crisis and dynamic capabilities in the context of sustainable competitive advantage and facilitate this kind of adaptive behavior (Makkonen, Pohjola, Olkkonen, & Koponen, 2014). It has to be stated that the changing environment transforms competitive infrastructure, and dynamic capabilities effectively explain the competitive components of a firm (Teece et al., 1997; Eisenhardt & Martin, 2000;; Zollo & Winter, 2002; Zahra, Sapienza, & Davidsson, 2006). Lin and Wu (2014) show dynamic capabilities can mediate the firm's VRIN resources to improve performance and reach organizational competency. Mathiassen & Vainio (2007) claimed that dynamic capabilities have been coined to capture the firm's ability to adapt to unpredictable and changing environments. They allow the firm to reconfigure its resources and respond to market changes effectively. Foerstl et al. (2010) described that general dynamic capabilities will differ from company to company. It has to be stated that they have common features even when they implement in different firms but might be idiosyncratic in their specific form. Eisenhardt, and Jeffery (2000) argued that dynamic capabilities are a set of specific and identifiable processes such as product development, strategic decision making, and alliancing. Consequently, the dynamic capability view discusses origination, process, contributions, and the effects of dynamic capabilities (Zollo & Winter, 2002; Zahra et al., 2006; Wang & Ahmed, 2007; Helfat & Peteraf, 2009; Lin & Wu, 2014). This study provides four dynamic capability dimensions: sensing, learning, reconfiguration, and coordination based on the studies carried out by Teece (2007) and Menon (2008). The implementation of dynamic capabilities leads to better competence to be achieved as the consequence of achieving organizational competence. Hence, the second hypothesis is followed:

Hypothesis 2. The higher the level of organizational DC, the higher the level of organizational core competencies (CC).

A large and growing body of literature is available on core competencies and their role in increasing the firm's competitive advantage (Srivastava, 2005). It is expected that academics, consultants and business executives support understanding of competence and dynamic competitive advantage by developing normative and theoretical preposition (Bogner et al, 1999). Further studies show that core competency and competitive advantage are not quite the same but it should not be overlooked that a successful competitive strategy is based on both concepts of core competence and competitive advantage (Javidan, 1998). Leonard-Barton defines core competence as a knowledge set that differentiates a firm and creates a competitive advantage (Leonard-Barton, 1992). Core competence can be considered as the base of a firm's competitive advantage; vast majority of markets can implement it for their future products when it refers to a specific knowledge for defining and solving problems (Srivastava, 2005). A successful company should focus on its core competence and invest in the development of activities creating value and achieve core competence that is the source of competitive advantage. Core competence is considered as a fundamental concept for competitive strategy in a highly competitive market which is identified as knowledge set helping a company to perform in a different way from competitors and results in a competitive advantage. The core competence concept has been applied by the organization to identify and efficiently utilize its power. Gupta et al., (2009) further argued that core competence is a collection comprised of communication, involvement and a deep commitment across

organizational boundaries. Ljungquist (2008) demonstrated the core competence has been developed to justify business diversity at large companies and support some internal processes such as product development. Bani-Hani & AL-Hawary (2009) further showed that a positive relationship exists between core competences and competitive advantage.

In the light of the above discussions, it is proposed that competency has positive effects on all the different types of SCA. In this respect, CC plays the role of mediator variable that carries the positive effects to the various aspects of SCA. Accordingly, the basic hypothesis on the relationship between CC and SCA is as follows:

Hypothesis 3. There is a positive relationship between the organizational CC and all the different types of SCA.

H3a. The higher the level of organizational CC, the higher the level of sustainable competitive advantage of market oriented (SCAM).

H3b. The higher the level of organizational CC, the higher the level of sustainable competitive advantage of oriented (SCAC).

H3c. The higher the level of organizational CC, the higher the level of centered sustainable competitive advantage of finance oriented (SCAF).

Although there are many different viewpoints on theories as RBV, KBV, DC, they are all similar in that to maximize the organizational competitive advantage and improve the organization's position among their competitors. There is debate on how organizations could reach to sustainable competitive advantage. Also many experts have revealed their opinions for such a matter, such as Porter who believed the cheap labors and natural resources are not good economy requirements (Porter 1985 cited by Andersen, 2013). He expressed that a competitive advantage is the ability obtained through resources and attributes that helps a firm to perform at a higher level than the other competitors in the same industry or market (Chacarbathi and Lynch, 1999 cited by Josiah, 2013). When a firm has reached a competitive advantage and prevents imitation by competitors, destructing competitor behavior and achieving sustainable competitive advantage is considered as an obvious result. However preventing imitation is not permanent; the firm should make any effort to delay this occurrence to gain the maximum benefit from its competitive advantage (Reed and Defillippi, 1990; Pearce and Robinson, 2000; Christensen, 2001; Chunxia, 2012). Barney argued that a firm has a competitive advantage when implies a value creating strategy while any current or potential competitors are deprived to implement the strategy simultaneously and they are also not capable of duplicating that (Barney, 2000). Trung (2014) believed that a strategic position of a companies' management is foreseeing the market trend and obtaining sustainable competitive advantage to improve companies' position among competitors.

It may be said that important subject in a competitive advantage concept is the question of what are the possible signs of a competitive advantage; in other words what are the measures showing that a company has reached a competitive advantage. According to the literature review and experts views on the subject, the mentioned measures have been classified into three categories comprised of market, finance and customer. A sustained competitive advantage is obtained through unique values which are creating a strategy that any other current or potential competitor is unable to imitate or imply it simultaneously and finally the using strategy cannot be duplicated for long period of time.

Customer: core competence which is defined as a skill enabling an organization to create a fundamental value and lead to customer loyalty should result in customer perceived value.

Studies show that customer loyalty and customer attention are two challenging concepts for all organizations. It is clear that loyal customers can raise sales and customer share and reduce costs and higher prices (Alrubaiee and Alnazer, 2010). As a result our study seeks to address two critical dimension of competitive advantage with a focus on customers: flexibility and responsiveness. Flexibility refers to organization capabilities to provide a superior customer value (Johnson, Scholes and Whittington, 2008) and responsiveness is defined as the ability of an organization to respond fast to their customers' requirements (Carlos, Sousa and Fernando, 2010). A competitive advantage can be obtained through meeting organizational goals and customer needs in a highly competitive environment (Evans et al., 2006). Therefore organizations should compete with each other for taking customer attention. In other words a competitive advantage is reached when customer demands are met more effectively and efficiently than their competitors as long as possible; therefore their competitors make attempt to duplicate, reproduce and even surpass the competitive advantage.

Market: Li and Zhou (2010) investigate how market orientation and managerial tie can impacts competitive advantage. This research indicated that one of the most important dimensions of a firm's competitive advantage is institutional advantage which means an organization's superiority in obtaining rare sources and institutional support. In this context it is stated that brands and corporate images have significant impact on sustained competitive advantage required for a highly competitive environment (Seetharaman, Nadzir and Gunalan, 2001; Amini, 2012).

Finance: Achieving a competitive advantage leads a company to reach and sustain above average profitability for some years (Jones and Hill 2013). Profit is gained through sales incomes resulted from customer purchase (Rijamampianina, Abratt, February, 2003; Thompson et al., 2012).

It can be argued that the financial performance, which is the combination of the achievements in performance indicators such as profit rate is higher than the industry average; increasing the efficiency in financial processes and saving costs is the final goal of banking industry that is positively affected by the market and customer performance.

Hypothesis 5. Higher market and customer performance improvement results in improved finance performances.

H5a. The greater the customer performance improvement, the greater the finance performance improvement.

H5b. The greater the market performance improvement, the greater the finance performance improvement.

Derived from the existing literature, the proposed relationships among resources and sustainable competitive advantage are discussed and hypotheses related to these variables are developed. The research framework generated in this study is illustrated in Fig. 2. This framework briefly proposes that the RBV, KBV, DC and CC will enhance SCA, which will then improve customer, market and finance performances.

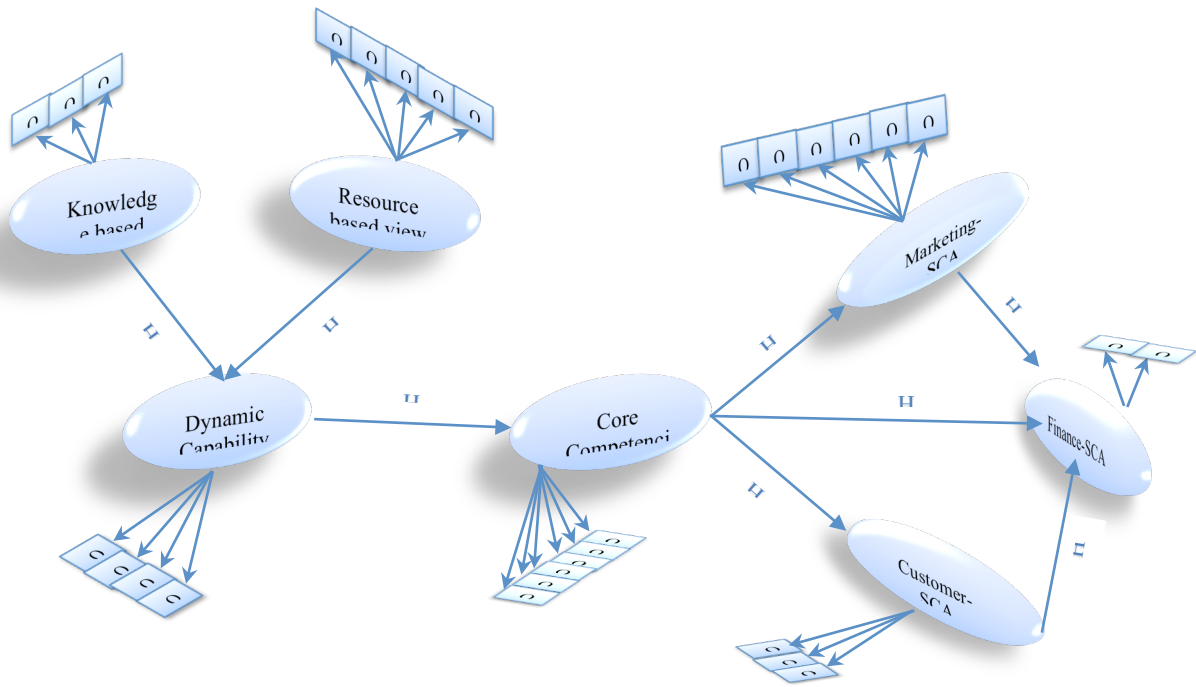


Fig. 2. Conceptual model between SCA and key factors affecting on its

METHODOLOGY

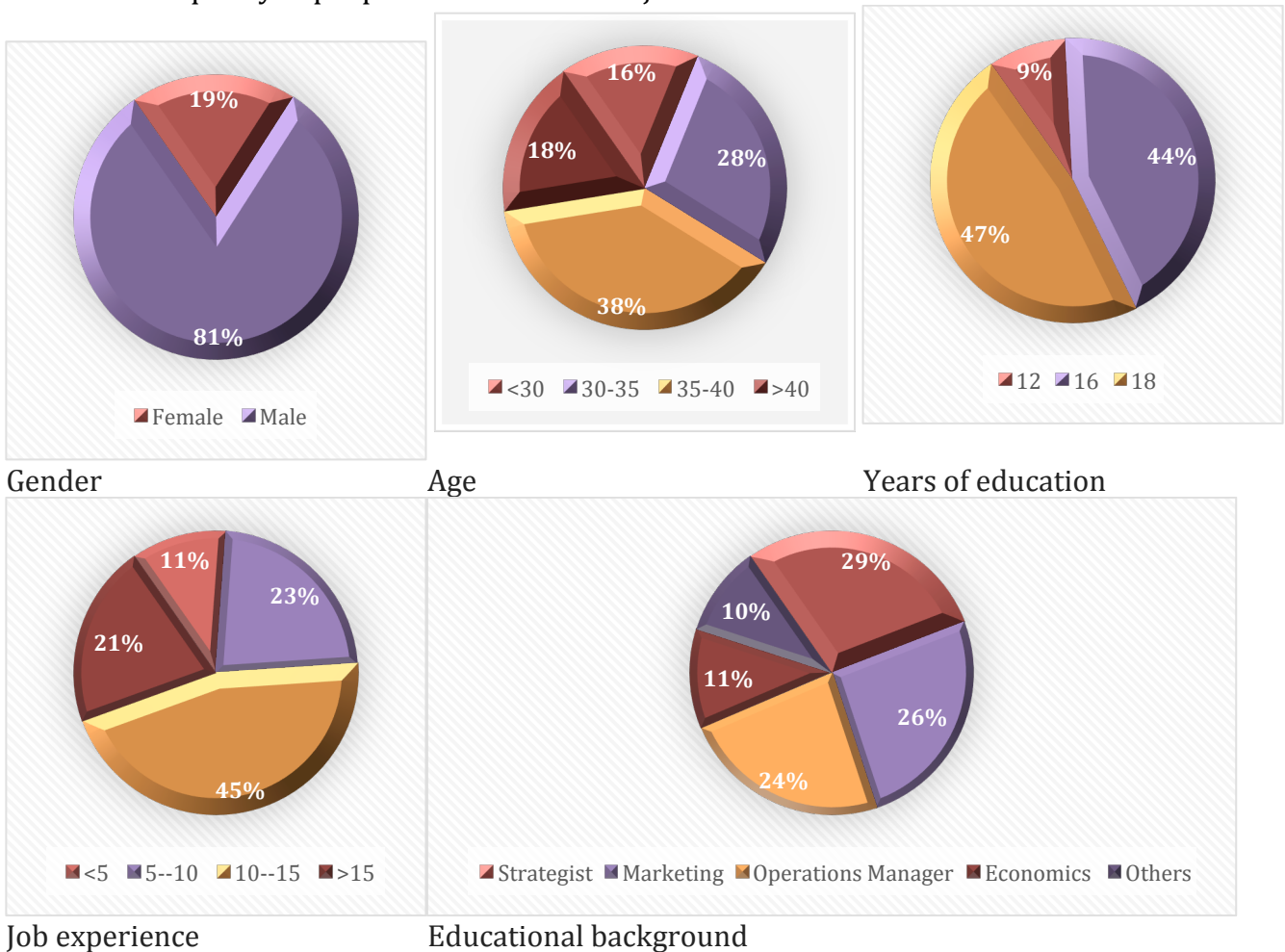
In this section, the sample, procedures of data collection, operational measures of variables and statistical analyses are studied in order to determine the links among the concepts of KBV, RBV, DC, CC and SCA.

Sample and procedures

The banking industry is a major part of Iran's economy. After the study of performance statistics on Iranian banks, interviews were conducted with expert academics in the banking industry and 50 of the deputy and directors of Iran banks. After all statistical studies and discussions, Mellat Bank of Iran (MBI) was chosen as case study because of the implementation of appropriate strategies in maintaining and enhancing its competitive advantage among other Iranian banks. The study shows that MBI has found the competitive advantage among their competitors in recent years. According to the Bank reportage of Iran annually, Mellat bank is superior to competitors in terms of finance, customer and market; and this superiority has continued over the recent years. Here, the study attempts to investigate this practical success in the context of an empirical study. Following the investigations conducted different strategies, these advantages are achieved. MBI has considerable growth in the competition with rival, turned a suitable locale for research to examine the influence of tie concepts in the banking industry.

As an effort to ascertain the content validity of the survey questionnaire, a draft survey was pre-tested by both academicians (i.e. two strategic management assistant professors) and practitioners (i.e. ten bank managers). The participants were requested to evaluate the survey questionnaire on its wording, clarity and relevancy. Ultimately, the final version of questionnaire was distributed randomly to the executors or senior managers, specialists and consultants from the administration and improvement methods, marketing, strategy, risk management and operational management department of MBI. The sample was chosen based on their knowledge on study specific issues. Sample size was limited by calculation method of Cochran sample size and using community correction coefficient. Due to high amount of questions, the respondents were asked to respond in 4 steps.

From the total of 150 questionnaires, 122 were returned with complete answers, which represent a response rate of 81.3%. The number of valid and usable questionnaires was 101. Fig.3 shows the company characteristics and the target respondents. In this figure it is indicated that the majority of respondents (81.1 percent) are males that is consistent with the Iranian society which still is relatively male dominated especially in the top management positions. The majority of managers are middle-aged and well educated. This is consistent with the Iranian society that is described as middle-aged and enjoys high levels of education in the bank department. Being well educated would greatly help MBI in building and accumulating DC to reach SCA now and in the future. Moreover, Fig.3 shows that the majority of managers (67 percent) is well experienced in this industry with more than ten years of experience. This holds a strategic implication that indicates MBI has relevant and sufficient business industry experience that is crucial for building and sustaining assets and capabilities as a source of competitive advantage. Finally, figure3 shows that 61.6 percent of managers have business education background which indicates there is reasonable recruitment process in the bank that focus on quality of people as one of their major assets to achieve success.



Measurement

This part is organized into five sections that present how to measure the dimension of each construct. In order to assess the precision and focuses of the respondents, some questions were designed negatively.

Resource based view (RBV)

Five resource based view dimensions were evaluated in this study including tangible assets, intangible assets, executive capability, human resource capability, management capability.

These RBV dimensions were selected based on the studies of Barney (1999). Each of these RBV practices was measured by Likert scale ranging from strongly disagree = 1 to strongly agree = 5.

Knowledge based view (KBV)

Three knowledge based views were evaluated in this study dimensions including empowering employees, promoting confidence, coding rules focus. These KBV dimensions were selected based on the studies carried out by Bhatt (2002). Each of these KBV practices was measured by Likert scale ranging from strongly disagree = 1 to strongly agree = 5.

Dynamic capability (DC)

Four dynamic capabilities dimensions were evaluated in this study including sensing, learning, reconfiguration, and coordination focus. These dynamic capabilities dimensions were selected based on the studies of Teece (2007) and Menon (2008). Each of these dynamic capabilities practices was measured by Likert scale.

Core Competencies (CC)

These core competencies questions were selected based on the studies of Javidan (1998) and Srivastava (2005). Each of these core competencies practices was measured by Likert scale.

Sustainable Competitive Advantage (SCA)

The SCA has been used to assess various competitive advantage settings. Therefore, the three area of SCA were chosen to represent the SCA dimensions in the present study. Reviewing the studies concerning the sustainable competitive advantage in service institutions such as banks found that most of the studies assessed the construct of service institutions from the market, costumer and finane view. Each of these SCA practices was separately measured and analysis. In order to measure respondents' perception towards the SCA within bank, a 5-point Likert scale was developed (1 = strongly disagree; 5 = strongly agree).

STATISTICAL DATA ANALYSIS

In this study, a Structural Equation Modelling (SEM) was used on the multi-item measures. In order to perform the SEM technique, data analysis was performed in four steps:

Checking normality assumption: prior to the analysis of the data the normality assumption was used. One of the main functions includes checking multivariate normality to determine if a data set is well modelled by a normal distribution.

Factor Analysis: consists of two parts, the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test, and exploratory factor analysis. Statistical data analysis should always raise question such as: Is the relationship among variables strong enough? Is it a good idea to precede a factor analysis for the data? Factor Analysis can reply to these questions with KMO and Bartlett's Test. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy tests whether the partial correlations among variables are small. The Kaiser-Meyer-Olkin measure of sampling adequacy is an index for comparing the magnitudes of the observed correlation coefficients to the magnitudes of the partial correlation coefficients. Another indicator of the strength of the relationship among variables is Bartlett's test of sphericity. Bartlett's test of sphericity tests whether the correlation matrix is an identity matrix; that will indicate the factor model is appropriate. This test is used to test the null hypothesis that the variables in the population correlation matrix are uncorrelated. In order to separate the dimensions of each construct, Exploratory Factor Analysis (EFA) performed with varimax rotation.

Confirmatory factor analysis (CFA): is performed to evaluate the overall measurement model. In order to evaluate the validity of measurement model, convergent and discriminant validity were evaluated. Convergent validity, along with discriminant validity, is a subtype of construction validity. Convergent validity can be estimated using correlation coefficients. Convergent validity is concerned with the degree that the both assessments of constructs theoretically and actually should be related (Campbell 1959). A successful evaluation of convergent validity shows that a test of a concept is highly correlated with other tests designed to measure theoretically similar concepts.

Examining the hypotheses through SEM: methodologically, the formulated hypotheses were measured and tested using SEM approach. This method proved to be far more superior to regression analysis. Firstly, SEM approach supplies statistical competency and provides a definite method to deal with multiple relationships simultaneously, while multiple regression analysis does not. Secondly, as SEM is capable of testing the relationships comprehensively, it has moved from exploratory factor analysis to confirmatory factor analysis. Thirdly, the unobserved concepts and the measurement error in the estimation process are also taken into the account with the use of the SEM practice (Kline, 2005). Given the many advantages of SEM, coupled with the support of many researchers stating that such an approach is a useful methodological assessment tool for many measurement models (Bollen, 1989), SEM was chosen to test the structural relationships between the seven constructs of KBV, RBV, DC, CC, SCAM, SCAC, and SCAF.

Test Results

Prior to the analysis of the data, the normality assumption is used in the data preparation stage. One of the main functions includes checking multivariate normality to determine if a data set is well modeled by a normal distribution. Normality test was achieved through skewness $< \pm 2$ and kurtosis $< \pm 2$. In This study, the amounts of skewness and kurtosis were the ranges. However, these ranges may be considered smaller or larger by different scientists of statistics. Furthermore, the Shapiro-Wilks tests were also used to verify the existence of normality; the null-hypothesis of this test is that the data are normally distributed and if the p-value is more than the chosen alpha level (i.e. 0.05), then the null hypothesis is accepted, there is evidence that the tested data are normally distributed. The result revealed the normal distribution of the data since the p-value is greater than 0.05. The p-value in this study is more than 0.05, thus the model satisfactorily fits a normality distribution (Razali and Wah, 2011).

The KMO measures the sampling adequacy which should be greater than 0.5 for a satisfactory factor analysis to precede. According to table 1, the KMO measure is 0.814, 0.865, 0.794 and 0.820 for KBV, RBV, DC and SCA, respectively. Large values for the KMO measure indicate that factor analysis of the variables is suitable. From the same table, we can see that the Bartlett's test of sphericity is significant. That is, its associated probability is less than 0.05. In fact, it is actually 0.000. It is small enough to reject the hypothesis. This means that the correlation matrix is not an identity matrix. It is concluded that the relationship among variables is strong. It is a good idea to proceed an exploratory factor analysis for the data.

In the course of the validation process, some items were found to have unacceptably low factor loadings less than 0.5 on their respective unobserved hypothetical or latent variable, which were subsequently removed. The internal reliability is evaluated scales by Cronbach's alpha ($C-\alpha$). The result has shown that the Cronbach's alpha value ranges between 0.765 to 0.953, 0.815 to 0.940 and 0.762 to 0.922 for KBV, RBV and DC factors, respectively, and 0.844 for SCA of market centered, 0.777 SCA of customer centered and 0.717 for finance centered indicating

according to Nunnally and Bernstein (1994), the measurement of the variables are well above the acceptable threshold of 0.70.

A convergent validity has been tested by assessing factor loadings which should be significant and exceed 0.5, composite reliabilities (CR) which should exceed 0.7, and the average variance extracted (AVE) that should be more than 0.5 for all constructs (Fornell & Larcker, 1981). In our model, all the factor loadings and composite reliabilities fall in the acceptable ranges and are significant at the 0.001 level. Factor loadings ranges from 0.52 to 0.98, 0.59 to 1.00, and 0.52 to 0.98 and 0.52 to 0.94, composite reliabilities (CR) range from 0.762 to 0.922, 0.857 to 0.955, 0.762 to 0.922 and 0.703 to 0.851, AVE ranges from 0.522 to 0.860, 0.547 to 0.835, 0.522 to 0.860 and 0.556 to 0.659 for KBV, RBV, DC, and SCA, respectively. The results show that the model meets the convergent validity criteria. Table 1 shows the means, SD, factor loading, AVE, CR and C- α of every constructs. Convergent validity can be established if two similar constructs correspond with one another, while discriminant validity applies to two dissimilar constructs that are easily differentiated. A successful evaluation of discriminant validity shows that concept test is not highly correlated with other tests designed to measure theoretically different concepts (Kline, 2005). Fornell and Larcker's approach has been used to assess discriminant validity. In this approach, the AVE for each construct should be higher than the squared correlation between the construct and any of the other constructs. Table 2 indicates the measurement model has satisfactory discriminant validity. In Table 3, diagonal elements in italics are the AVE and off-diagonal elements are the squared correlations between constructs. It is obvious that each diagonal element is higher than respective off-diagonal elements. Therefore, all constructs in the measurement model were judged as having adequate discriminant validity.

Table 1: Results of CFA and internal reliability testing & K-M-O measure

Factors	Mean	SD	Loading	AVE	CR	C- α
Factor 1: (empowering employees)					0.54	0.82
0.823						
_ has made it possible for employees to apply their Individual experiences they have had during their work	3.65	0.888	0.77			
_ has provided a condition in which responsible and Aware employees may turn their ideas into reality	3.58	0.941	0.67			
_ maintains that employee training which is related to Employee performance, job processes and professions						
Is a most significant function of an organization	3.64	0.916	0.75			
_ has not provided appropriate trainings by which Employees may realize the business camouflaged reality	3.53	0.819	0.74			
_ try to revive and accomplish knowledge-based Concepts by using knowledge-led team	3.46	0.954	0.98			
_ is becoming more empowered by holding scientific and Knowledge-led meetings	3.29	0.887	0.90			
_ surveys problems and detects the best solution regarding Employee commitment by making participation	3.38	0.906	0.73			

Factor 2: (promoting confidence and motivation of employees)		0.56	0.76
0.765			
_ has believed that employee behavior with customers is one			
Of the evaluating factors requiring for their competency	3.53	0.819	0.88
_ is able to fulfill expert needs and can encourage			
And reward them	3.01	0.971	0.92
_ the experts and qualified and smart people are			
Not free for what they want to do	3.28	0.932	0.73
_ has got balance between organizational rules and			
Requirements, and employee creativity and risk taking	3.11	0.927	0.76
_ holds discussion and brainstorm meetings to improve			
Employee communications	2.95	0.908	0.97
_ let's people revise what they think about each other by			
Having knowledge-led conferences	3.23	0.914	0.84
Factor 3: (coding rules)		0.61	0.83
0.953			
_ clarifies rules and procedures to prevent employee			
Multi-faceted understandings	3.19	0.952	0.91
_ reviews all prescriptions throughout the entire			
Organization as the environment changes	3.14	0.898	0.95
K-M-O measure of sampling adequacy =0.814; Bartletttestofsphericity =928.983; p<0.000.			
Factor 1: (tangible assets)		0.81	0.95
0.940			
_ may provide variety of services in both aspects of currency			
and monetary	3.32	1.07	0.95
_ enjoys having a good self-banking services such as POS			
and ATM	3.39	1.05	0.93
_ has not been successful in the field of investment			
such as stocks, deposits, and facilities	3.18	1.11	0.97
_ is a leading financial institution among all the banks			
of the country in the field of market, for example			
how many accounts and customers it has	3.32	1.07	0.99
_ is barely considered as a strong institution in terms			
of infrastructure such as IT and software and			
hardware systems	3.25	1.14	0.59

Factor 2: (intangible assets)				0.74	0.93
0.907					
_ it has a huge information data base and it is strong in					
the field of information and communication	3.57	1.04	0.81		
_ has involved trained, empowered, and responsible					
employees	3.62	1.09	0.79		
_ has an organizational identity and there is a clear					
Coordination between internal and external image					
of the bank	3.41	1.05	0.86		
_ has strategic programs in order to create ideas					
and innovation	3.57	0.99	0.87		
_ is equipped with the swift network hardware and software					
and also it is a member of it	3.51	0.97	0.83		
_ has not been able to successfully make customer satisfaction					
and make reliability and quick response as well	3.44	0.96	0.72		
_ is in a high position regarding credit and population	3.41	1.05	0.74		
Factor 3: (executive capability)				0.83	0.92
0.923					
_ has appropriately provided qualified services					
and new service development	3.76	0.79	0.75		
_ has reached intersectional coordination,					
cooperation, and codirecting through all its					
managerial and operational levels	3.35	1.01	0.87		
_ has created a service and customer-oriented and					
innovative organizational culture which is quite					
compatible with market changes	3.34	0.97	0.94		
_ has the a distinctive ability to deliver quality services	3.49	0.93	0.78		
_ has assumed that creativity, innovation, and cost					
saving in the business is a part of its research					
and development process	3.54	0.94	0.86		

Factor 4: (human resource capability) 0.815				0.55	0.86
_ has involved responsible employees with the ability of quick responding to customers	3.89	0.93	0.77		
_ has made it possible for employees to have the chance to apply their skills, abilities, capabilities, and knowledge	4.20	0.75	0.70		
_ does not provided organizational learning which encourage employees to learn more	3.99	0.85	0.74		
_ has created an environment in which employees can have teamwork and cooperate together	3.75	0.91	0.66		
_ does not have efficient skills regarding social capability like teamwork and communication	3.78	0.90	0.82		
Factor 5: (management capability) 0.930				0.84	0.95
_ has spread knowledge and organizational experiences through all its sectors and tries to update them	4.14	0.84	0.95		
_ has unified all the visions and managerial thoughts through all its senior management	3.90	0.87	0.77		
_ has built a flexible culture by which it has the ability to adapt with unexpected changes and other's ideas	4.14	0.80	0.92		
_ senior managers have enough managerial skills and a real leadership is established in the organization	4.12	0.86	1.00		

K-M-O measure of sampling adequacy =0.865; Bartletttestofsphericity =2643.219; p<0.000.

Factor 1: (sensing)				0.51	0.85
0.798					
_Understanding customer needs and market dynamics	3.65	0.88	0.98		
_Realizing environmental signals and information	3.58	0.94	0.79		
_Reacting quickly and appropriately to all information	3.61	0.93	0.91		
Received from market					
Factor 2: (learning)				0.56	0.76
0.765					
_Releasing information quickly and in time	3.53	0.82	0.81		
_Detecting, verifying, employing, and applying new	3.46	0.96	0.80		
Solutions					
_Generating new ideas and giving them the chance	3.64	0.84	0.52		
To be real					
Factor 3: (reconfiguration)				0.51	0.72
0.853					
_Combining some services into one new service and					
For using that one again	2.99	1.15	0.71		
_Rotating internal resources such as job rotation					
For employee	3.14	1.03	0.81		
_Making appropriate resource configuration					
In order to respond to environment changes	3.23	1.08	0.68		
_Creating innovation and new solutions in decision					
Making pro	3.00	1.14	0.66		
_Maintaining wise managers who believe in cooperation					
And performing such activities involved cooperation	3.04	0.95	0.64		
_Knowledge distribution, allocation, and finally					
Knowledge sharing	3.27	0.94	0.87		

Factor 4: (coordination) 0.59 0.79
0.805

- _ Putting right people on right places while they are cooperating with each other 3.53 0.96 0.79
- _ cooperating and effectiveness of different sources 3.44 0.81 0.64
- _ Giving efficient, flexible and high-quality services 3.55 0.98 0.71

K-M-O measure of sampling adequacy =0.794; Bartletttestofsphericity =957.257; p<0.000.

Factor 1: (market) 0.52 0.87
0.844

- _ Integrate performances to find the highest position among all competitors 3.70 0.98 0.69
- _ Focusing on market growth and market share indicator 3.75 0.97 0.73
- _ Successful in effective in the market 3.42 1.05 0.84
- _ Providing a socially complicated environment which it is difficult for competitors to imitate 3.58 0.93 0.71
- _ Fully committing to the society and tries to create value for that 3.38 0.89 0.68
- _ Integration and re-formulation of services and create new services faster than competitors 3.47 0.82 0.67

Factor 2: (customer) 0.67 0.81
0.777

- _ Attractive offers the customers are not superior compared to competitors 3.27 1.07 0.66
- _ Providing efficient services with quality and flexibility 3.32 1.10 0.92
- _ Investing in customer loyalty and satisfaction and create a positive impression 3.03 1.11 0.85

Factor 3: (finance)

0.64 0.81

0.717

_Profit rate is higher than the industry average	3.30	0.922	0.58
_Increasing the efficiency in the financial processes and save costs	3.60	0.99	0.97

K–M–O measure of sampling adequacy =0.820; Bartletttestofsphericity = 440.401; p<0.000.

Table 2: Discriminant validity analysis

Factors (KBV)	SEN	LEA	REC	COR
SEN	<i>0.860</i>			
LEA	0.336	<i>0.523</i>		
REC	0.116	0.160	<i>0.510</i>	
COR	0.325	0.449	0.160	<i>0.662</i>

Factors (RBV)	TA	ITA	HRC	EC	MC
TA	<i>0.807</i>				
ITA	0.129	<i>0.746</i>			
HRC	0.062	0.518	<i>0.832</i>		
EC	0.067	0.562	0.260	<i>0.547</i>	
MC	0.026	0.221	0.102	0.115	<i>0.835</i>

Factors (DC)	SEN	LEA	REC	COR
SEN	<i>0.860</i>			
LEA	0.336	<i>0.523</i>		
REC	0.116	0.160	<i>0.510</i>	
COR	0.325	0.449	0.160	<i>0.662</i>

Factors (SCA)	SCAM	SCAC	SCAF
SCAM	<i>0.503</i>		
SCAC	0.176	<i>0.556</i>	
SCAF	0.250	0.231	<i>0.659</i>

The structure model

Fig. 2 exemplifies the proposed structural model showing the association among the seven dimensions of KBV, RBV, DC, CC, SCAM, SCAC, and SCAF, respectively. To examine the model, conventional maximum likelihood estimation approaches were used. Fig. 4 summarizes main findings of SEM analysis. It assessed the measurement model fit by evaluating: (1) absolute fit indices including observed normed χ^2 (χ^2/df), goodness of fit index (GFI), adjusted goodness-of-fit index (AGFI) and adjusted goodness-of-fit index (AGFI); (2) Comparative fit indices including normed fit index (NFI), and comparative fit index (CFI); and (3) parsimonious fit indices including parsimony goodness-of-fit index (PGFI) and parsimony normed fit index (PNFI) and the root mean square error of approximation (RMSEA). The summary results of

the structural equation modeling technique are shown in Table 5. Examples of the fundamental measures are the ratio of χ^2 statistics to the degree of freedom (df), normed fit index (NFI), comparative fit index (CFI), goodness-of-fit index (GFI) and the root mean square error of approximation (RMSEA). Table 5 summarizes the results of CFA models, all the model-fit indices are well above their common acceptable levels in which χ^2/df was less than 3.0 and greater than 0.90 for GFI, AGFI, CFI and NFI as suggested by Bagozzi and Yi (1988), with RMSEA less than 0.08 according to Browne and Cudeck (1993), suggesting that the CFA models fit well. In their studies, Anderson and Gerbing (1988) suggest that values greater than 0.90 are desired for GFI, CFI, AGFI, and NFI while Browne and Cudeck (1993) required values less than 0.08 for RMSEA. Based on Table 5, the ratio of χ^2 statistics to the degree of freedom for our model was 2.8. The value of the remaining fit indices include the GFI = 0.96; AGFI = 0.91; CFI = 0.94; NFI = 0.95; and RMSEA = 0.072. All the model-fit indices are well above their common acceptable levels, suggesting that the structural model fits well. It can be concluded that a goodness-of-fit exists for the measurement scale of market orientation. Fig. 4 shows the standardized path diagram of T-values for the structural model. Therefore, we can conclude that the model fits the data well and thus is able to explain the research hypotheses

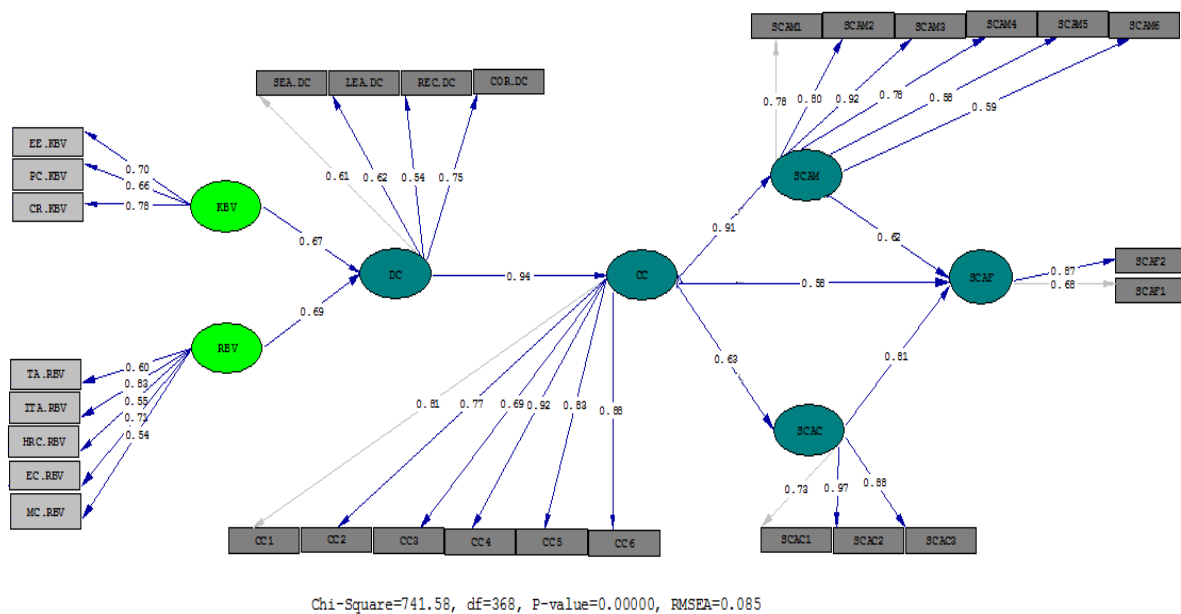


Fig. 4. Structural Relationship model between SCA and key factors affecting on its

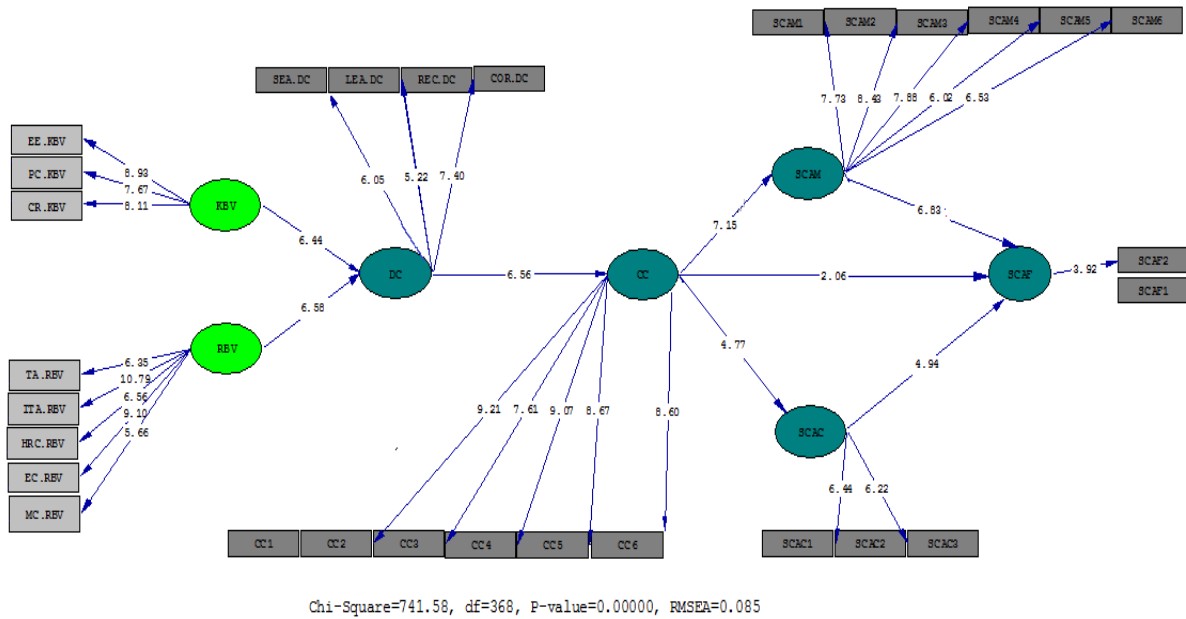


Fig. 5. T-value model between SCA and key factors affecting on its

Table 3: Overall fit indices of the CFA model

Fit index	Scores	Recommended cut-off value
Absolute fit Indices		
X ² /df	2.67	≤3
GFI	0.93	≥0.9 ; ≥0.8
AGFI	0.91	≥0.9 ; ≥0.8
Comparative fit Indices		
NFI	0.92	≥0.9
CFI	0.96	≥0.9
Parsimonious fit Indices		
RMSEA	0.06	≤0.08 ; ≤0.1
PGFI	0.87	The higher, the better
PNFI	0.95	The higher, the better

Hypothesis testing

In the hypothesis testing stage, the proposed hypotheses were examined using the Structural Equation Modelling (SEM) technique. The findings (Table 5) for H1a (KBV to DC, $\gamma_{11} = 0.67$; $p < 0.000$) and for H1b (RBV to DC, $\gamma_{11} = 0.69$; $p < 0.000$) imply that KBV and RBV have the positive and significant relationship with DC in Mellat bank. By adopting two theories of knowledge based view and resource based view, firms will be better able to improve the level of dynamic capability through a more systematic approach. This result is consistent with the findings of Lin and Wu (2014), where the authors found that DC has an effect on the performance, resulting in improved SCA. Pertaining to H2 (DC to CC; $\gamma_{21} = 0.94$; $p < 0.000$), the findings revealed that there is a positive relationship between the dimensions of dynamic capability and core competency. This result is consistent with the findings of Lin and Wu (2014), where they found that DC has an effect on the competency, resulting in improved performance. Pertaining to H3a (CC to SCAM; $\gamma_{31} = 0.91$; $p < 0.000$), the findings revealed that there is a positive relationship between the dimensions of core competency and SCAM. For the third hypothesis, H3b (CC to SCAC, $\beta_{21} = 0.63$; $p < 0.000$), the results were significant, implying that there is a significant relationship between competency and SCAC. This result is supported

by the findings of Terziovski and Dean (1998) where they found the intensity of customer management practices showed a positive association with SCAC outcomes. Pertaining to H3c (CC to SCAF; $\gamma_{21} = 0.56$; $p < 0.000$), the findings revealed that there is a positive relationship between the competency and SCAF. For the third hypothesis, H4a (SCAM to SCAF, $\beta_{21} = 0.62$; $p < 0.000$), the results were significant, implying that there is a significant relationship between SCAM and SCAF. Pertaining to H4b (SCAC to SCAF; $\gamma_{21} = 0.81$; $p < 0.000$), the findings revealed that there is a positive relationship between the dimensions of core competency and SCAM. This result is quite similar to Samat et al. (2006) study on the Malaysian service firms, where the information and communication has the greatest impact on service quality followed by other quality management practices such as customer focus, continuous improvement and empowerment. This result is consistent with the previous studies of Chang and Chen (1998) and Camarero (2007), where they found the market orientation has a positive relationship with service quality.

Table 4: Standardized path coefficients

Hypotheses	Estimate	p	Remarks
H _{1a}	0.67	<0.000	Supported
H _{1b}	0.69	<0.000	Supported
H ₂	0.94	<0.000	Supported
H _{3a}	0.91	<0.000	Supported
H _{3b}	0.63	<0.000	Supported
H _{3c}	0.56	<0.000	Supported
H _{4a}	0.62	<0.000	Supported
H _{4b}	0.81	<0.000	Supported

DISCUSSION

The empirical findings of this study are crucial to SCA and the key factors affecting it. From theoretical viewpoint, this study has undoubtedly contributed to the existing literature by providing a better understanding on the proposed structural relationships between SCA and key factors affecting it, where the structural relationship between constructs can be determined using SEM, which is superior to regression analysis. As far as the proposed structural model is concerned, this study offers some evidence for a positive effect of KBV, RBV, DC and CC practices on SCA. From a managerial perspective, the findings of the current study guide the banks to a better understanding of the importance of factors affecting on SCA in their managerial actions in becoming a truly market, customer and financial center. Hence, it is imperative for service providers to devote more attention to embrace these factors as a vital management tool for improving competitiveness. In a view of the highly competitive service environment, service practitioners should emphasize KBV, RBV, DC and CC as feasible change management tools to achieve a greater degree of SCA within their banks. Consequently, banks should constantly monitor the competitive service markets and response to change better than their rivals do. Furthermore, this study shows that the role of customer orientation has expanded and contributed to SCA. Hence, customer orientation practitioners should take full advantage of customer management to enhance the SCA. In doing so, top management must ensure a close cooperation and coordination among component of customer orientation in meeting the ever-changing customer needs. From the methodological perspective, the hypotheses formulated were measured and tested using the SEM approach. This method

proved to be superior to regression analysis. Firstly, while SEM approach supplies statistical competency and provides a definite method to deal with multiple relationships simultaneously, multiple regression analysis does not. Secondly, as SEM is capable of testing the relationships comprehensively, it has moved from exploratory factor analysis to confirmatory factor analysis. Thirdly, the unobserved concepts and the measurement error in the estimation process are also taken into the account with the use of the SEM practice (Kline, 1998). Given the many advantages of SEM, coupled with the support of many researchers stating that such an approach is a useful methodological assessment tool for many measurement models (Boolen, 1989; Joreskog and Sorbom, 1993; Jimenez-Jimenez and Martinez-Costa, 2009), SEM was chosen to test the structural relationships between the four constructs.

This study empirically contributes to the attributes of KBV, RBV, DC and CC that can be seen on SCA in three areas of market, customer and finance. From the analysis, it was shown that all the factors contribute significantly and positively to SCA. Moreover, implementation of sustainable competitive advantage of customer and market can improve the SCA of the Mellat bank. Findings are consistent with the studies performed by Lin and Wu (2014), which supported the strong positive relationship between organizational resources and capabilities and SCA since dynamic capabilities can mediate the firm's VRIN resources to improve performance and reach sustainable competitive advantage. Furthermore, Stephen (2007) findings about DC principles which serve as an apparatus for a company to achieve CC and SCA have also been supported by our study. Once practices of sustainable competitive advantage of market oriented are in place, market needs can be identified easily and marketing strategy can be further improved, creating values for the customers and accordingly, increase company profits. In other words, market-centered banks have the ability to understand their market targets better. They are more committed to provide premium service quality to their customers. And also, their efforts can lead to the provision of high quality service, which will then result in enhanced company performance. Generally, market-centered service firms are better able to meet the needs and expectations of their customers by providing superior service quality. In summary, when dimensions of sustainable competitive advantage of customer are present in the bank, banks will be prompt, proper and reliable, thus enhances the assurance of the bank services to the customers. Consequently, increase their profits and productivity.

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Remuneration and Management Behavior: A Review

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Abstract

Environmental accounting (EA) practices are developing rapidly in some countries and has a positive impact on their organizations. Sustainability report (SR), as an indicator of EA practices, helps company in improving its reputation, set by the management. However, some countries in ASEAN including Indonesia do not have relevant accounting standards on the environment. EA practice is still not widely known in Indonesia, although, internationally there have been standards that provide guidelines on environmental practices such as the Global Reporting Initiative (GRI). Another prospect in GRI is remuneration. Remuneration is a part of personnel cost which is a motivation about the positive effects of EA practices to disclose management concerns. This is a review paper that provides discussion on remuneration structure and the consistency of EA practices in the Sustainability Report.

Keywords: Component; Environmental Accounting; Global Reporting Initiative; Remuneration; Incentive; Personnel Cost, Sustainability Report. JEL Classification: M4, M1

INTRODUCTION

The word 'environment' has an important dimension in our lives (Yusoff & Lehman, 2007). The simple definition of environment is the 'surrounding' (Guo, Ai & Polenske, 2008). The environment is a combination of all of the physical and organic factors that affect a living being, or ecological society and power (Yusoff & Lehman, 2009), its endurance and growth to support economic system and human welfare (Barbier, 1989, p.3). Other researchers named it as biodiversity-related (Jones, 2003; Cho, 2007). They support that the corporations should take environment issues seriously and make it as part of business strategy in their organizations. According to the Agenda 21 of the Rio Summit on Environment and Development organized by the United Nations in 1992,

"Natural disasters cause loss of life, disruption of economic activities and urban productivity, particularly for highly susceptible low-income groups, and environmental damage, such as loss of fertile agricultural land and contamination of water resources, and can lead to major resettlement of populations" (p. 57).

One of the strategy in environmental aspects is to seriously focus on the environment accounting perspective. Scholars opined that environmental accounting could improve usage of resources efficiently and corporations productivity to enhance profitability (TBL framework).

However, implementation of EA is still at its infancy. There are views that the absence of uniform environmental accounting standard could be the effect of the lack of EA implementation.

Reviewing the literature, it is noted that even in academic field, there is lack of environmental accounting empirical evidence. Previous studies mainly emphasized on economic impact through brand equity (Benoit-moreau 2011). Others on the other hand, focused on the social impacts such as externalities of business operation on community (Beck, Campbell and Shrives 2010) and environmental impacts by decreasing negative effects on natural resources (Farouk, Cherian, & Jacob 2012). Little attention was given to the environmental accounting per se.

Needless to say, environmental accounting information a key process in performing the context of environmental activity into business system. Accounting scholars (Bewley, 2005; Brown & Fraser, 2006; Firoz & Ansari, 2010) pointed that disclosure of environmental accounting information is key in performing accountability (Bewley, 2005; Brown & Fraser, 2006; Firoz & Ansari, 2010). Based on the importance of environmental accounting and the limited empirical evidence that contribute to enhance the knowledge in this area, this paper attempts to discuss two points, which are: first, the benefits of environmental related practices for the management which should be recognized and measured in EA, and second, the impact of the beneficiary giving on management through the concept of evaluation on the relationship between remuneration and sustainability report.

BENEFITS OF ENVIRONMENTAL ACCOUNTING

There are many benefits of environmental accounting; however this paper attempted to discuss on benefits from external stakeholders and internal management. In respect of the external stakeholders, the reporting of environment activities in the financial report would educate stakeholders. Nonetheless, there was view that in the case of standardization of practices are less relevant for environmental management accounting than it is for external reporting (ACCA, p. 65).

One other benefits is that environmental accounting (EA) is an important marketing tool because it communicates with external parties about a company's environmental activities (Benoit-moreau, 2011). It also helps a company to establish a satisfactory environmental image and create competitive advantage (Beck et al., 2010; Raska & Shaw, 2012). As pointed, environmental accounting is not only a matter of accounting, but it also matters for sustainable development (Husser et al., 2012; Farouk, Cherian & Jacob, 2012).

Accounting contributes on corporate management. It can affect the behavior of individuals or organizations extensively by being more transparent, objective and efficient. Behavior changing does not happen automatically. Somehow, external policies could be determining individual or organization perceptions (Gunningham, Kagan & Thornton, 2004). Implementation of environmental accounting is an external policy imposed by law and other stakeholders such as consumers, NGOs and international or pleaded as interventionist regulations (Yakhou & Dorweiler 2004).

Legitimacy Structures on Remuneration Measurement

Generally, accounting conservatism in respect of environmental accounting practices relates with determination of the allocation of environmental costs. Here, environmental cost refers to asset and liabilities (Firoz & Ansari, 2010). Hence, personal cost relate to the environmental conservation in business should be reflected to the actual performance. Magness (2006) revealed human resource as a factor who driving the decision to disclose information about social and environmental matters. It's main principle to see the effect of personal cost

(remuneration) relate to the environment management in the current period as the first order which recognizing a specific program such as the Environmental Management System (EMS). Whereas, performance measure can be summarized at ex-post and ex-ante based on the actual metrics data. However, it's not all performance data can be published in the environmental disclosure (ED). Corporate managements are to be selective to pretend creating positive image or hold on some bad information not to be published (Gunawan, 2015).

The regulation shall be adjusted to the internal purposes and depend on the strength of legitimacy within the organization. As revealed by Darmadi using Tobin's Q method (2012), the principal-agent conflicts appear to be more prevalent in corporations with diffused ownership structure, where there is not even a single majority shareholder than in firms with concentrated ownership, such problems may exist between the controlling shareholders and minority shareholders. Here, remuneration structure seems to depend on ownership structure.

According to the Sustainability Reporting Generation 4 (GRI-SRG4) section LA13 on Manual Sustainability Reporting Guidelines, benefits for management about remuneration or incentive are divided into several criteria. The measurement is based on first, payroll and second, capital structures:

1. The level of highest governance body and the board of directors to the level below, on the basis of measurements of fixed periodic payments, variable periodic payments, incentive or bonuses, latest payments, and the recovery of money already disbursing, termination payments.
2. The level of highest governance body itself. Remuneration becomes a part of capital equity which represents the wealth of shareholders.

Ideally, the appreciation for supporting company's strategy to environmental conservation is given by highest governance body to the employees. It is an intention to get their loyalty, maintaining the quality of work, and increasing productivity (Li-Chin & Taylor, 2007). In accounting principles, employee appreciation and performance must be measured in quantity, so that the information can be given in a transparent manner.

In fact, transparency of remuneration as part of EA reporting in Indonesia is provided to the highest level of governance or executive (Darmadi, 2012). He examined the determinants of compensation structure of the Indonesian listed corporations and found that firm performance, board structure, ownership structure, and firm-specific characteristics are significantly associated with remuneration structure.

The purpose of remuneration in actuality is to avoid agency cost. The main role of the members of the board executive observe and control the agency cost such as earnings management activities as this would become an exemplary to the lower level management for performing activities in accordance with their higher level management (Bassett, Koh, and Tutticci 2007).

Allocating Benefits to the Proper Parties

Some arguments have been given to emphasize on the benefits of EA practices for management. Amongst the topic of EA, there exists a better practice about its beneficiary to the organization for the whole structure from top to bottom line rather than from bottom to the top line (GRI 2011).

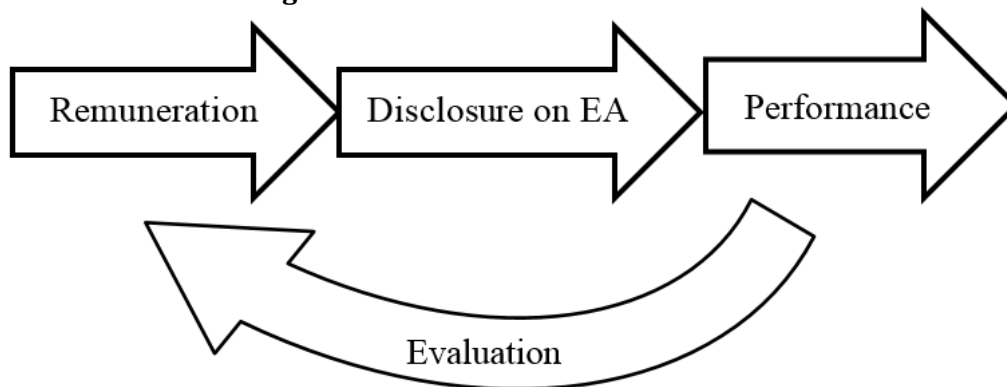
In top-down approach, a discourse image is given to external stakeholders about the performance of executive board members supporting the needs of shareholder and powerful

publicity for every action to other stakeholder attention. The benefit given to shareholders is definitely a capital revenue (GRI 2011). It shows the success of a business strategy run by the CEO. While the bottom-up approach is determined through the disclosure of human resources (Euginio, 2009).

Explicitly, GRI inscribes the reporting of benefits for employees and benefits for the executive board members. Some disclosure items as listed:

1. Report the process of determining remuneration. Report whether remuneration consultants are involved in determining the remuneration and whether they are independent of management. Report any other relationships which the remuneration consultants have with the organization.
2. Report how stakeholders' views are sought and taken into account regarding remuneration, including the results of votes on remuneration policies and proposals, if applicable.
3. Report the ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country.
4. Report the ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country.

Figure 1 Evaluation on Remuneration



Source: Authors

Accordance to GRI (2011), the methods of remuneration given to the employees and the highest management level are summarized based on the amount of wages received by the principle. And it will not cause the aggregate income widened in the same level. As shown in Figure 1 that the relationships amongst remuneration, disclosure on environmental accounting practices and performance expected need to be evaluated at the end of each accounting period in order to avoid insignificant performance on remuneration allocation.

IMPACT OF REMUNERATION ON MANAGEMENT BEHAVIOR

Remuneration structure under the guideline of GRI is more determined than without any standard assistance. Research about decision making on specific accounting policy is based on Trotman (2011) who suggested that the research on the judgment and decision making in accounting can be inferred from management motivation in which the impact of personality factors on motivation should also be investigated. Hunton et.al (2008) found that audit committee lacks monitoring in revenue recognition under SEC requirement because of tied-up

directors, but they do not explain reason or motivation of tied-up-directors such private issues or have another project gives higher incentives or remuneration matter.

Coined about incentivesm Robert et.al (1992) found the interaction of cognition process, performance, and incentives using U-test. As they noted that the performance-based monetary incentives will have an impact on experimental results depending on (1) the number and types of cognitive processes required for the task (i.e., the task structure), (2) the degree to which relevant determinant has taken place prior to the experiment (i.e., expertise), and, (3) the existing level of intrinsic incentives. Likewise, Rober et al. (1992) put the level of intrinsic incentives as explanatory variables for accounting performance, but they did not put recognition on statutory legitimacy on the specific task. Considering the compliance to regulatory legitimacy on the environmental issues, it should be taken as part of business continuity. It is a specific task for management and not for the organization. Thus, the related intrinsic incentives should depend on performance that has regulatory imposed on the effort.

Environmental disclosure publications are still not in sustainable practices, as accounting regulator refers to characteristic of formal regulation (government constitution and policy). It is revealed by Webb, Cahan and Sun (2008) that the differences in environmental disclosure (ED) practices are based on homogenous data characterized by mandatory disclosure. It has been highly correlated since mandatory disclosures reflect accounting standards and common-law countries have more rigorous accounting standards. As Indonesia is a civil-law country where Civil Law is essential for establishing a civil society based on contracts and also as a legal basis for developing private laws, so how it works for a civil society (Sakumoto, 2004, p. 221). The contribution of voluntary disclosure is more subjective than objective which leads to inappropriate practices on EA. Subjective is highly dependent on the type of social and environmental problems that the companies are addressing in the community. Özsözgün Çalışkan (2014) emphasized on specific accounting standards to be implemented in bookkeeping and reporting social and environmental issues related to a firm's activities. The standards would shed light on the challenges that are the needs of the communities for the evaluation of the implicit consequences of firms' activities. Heavy tasks for internal management to control the dynamic conditions lead to high payoffs of monitoring (Jensen & Meckling, 1976). Legitimacy theorists believe that business entities provide environmental information to show that they have been good stewards of the earth (Freedman & Stagliano, 2004). According to Tilling (2004), business entities motivate to do this as a means of legitimization.

A significant approach using theory (x) and (y) of Douglas McGregor who introduced Theory X places exclusive reliance upon external control of human behavior, whereas Theory Y relies heavily on self-control and self-direction. Adopting on this theory, we can set aspect on reporting based on theory (x) as external control of management behavior about the environmental policy, whereas aspect on remuneration as theory (y) on self-control and self-direction of management. Cited on McGregor article on 1966,

“The fact that management has provided for these physiological and safety needs has shifted the motivational emphasis to the social and perhaps to the egoistic needs. Unless there are opportunities at work to satisfy these higher- level needs, people will be deprived; and their behavior will reflect this deprivation. Under such conditions, if management continues to focus its attention on physiological needs, its efforts are bound to be ineffective. People will make insistent demands for more money under these conditions”.

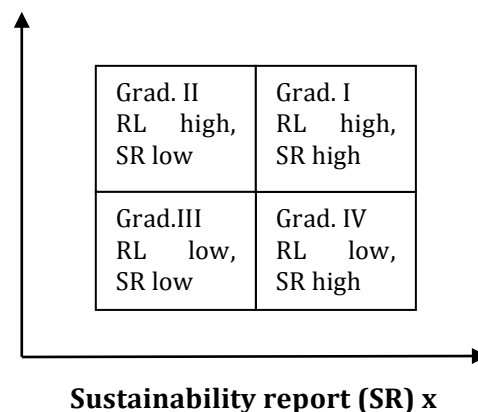
McGregor (1966) referred to physiological and safety needs as part of performance measure. It is supported by Magness (2006) and Gunawan (2015) on occupational health and safety standard as part of performance measure on personal cost.

Evaluate Remuneration Structure

Security analysis is proposed by Jensen & Meckling (1976) that contributes on advance plausible performance measure directive to "private information". The environmental and social aspects are contextually inserted as externalities pressures. It is important to develop an identification of determinants of the purpose of the remuneration to motivate management supporting EA practices continuously as Yang et al (2014) found a significant association between executive compensation and firm performance more on cash-based than stock-based. We suggest the concept of equation of $y=f(x)$ to explain the intercorrelation between variable (y) as expected output for management (remuneration level) and determining variable as inputs that imply on (x) number of disclose of GRI items, especially, on environmental aspect as Robert et al (1992) took task structure and firm performance (Darmadi,2012) and using variables accounting conservatism, compliance to regulatory, year, company size, industrial classification to get least absolute deviation regressions (Coles et al, 2008).

Stemming on the concept of the remuneration, impact evaluation can be followed as shown in Figure 2. In the figure, it can be seen that the effect on variation remuneration expenditure will be addressed by the top management affecting the heuristic manner in which the expenditure burdened on their company.

Figure 2 Behavior of Remuneration Level and Reporting Level
Remuneration level (RL) y



The first gradient shows higher remuneration level (RL) with higher level of sustainability report (SR). Based on the assumption that employees are motivated enough to exert effort if they believe that there is a high probability for their efforts and giving an outcome that they value sufficiently. Higher performance was obtained under difficult budgets and situations of higher expected reward (which was also associated with increased satisfaction amongst employee). Only high remuneration can occur if excessive allocation and size of company remuneration charge. If this happens, then the next risk on management budgetary will halt because of the volatility expenditure occurred in the department. Trotman (2011) argued that social concerns might reduce the need for extensive incentive contracting.

The second gradient shows the remuneration level is high, but SR is in low-level indicating the agency cost or earnings management activities. Higher unfair remuneration is given to every layer of management and the executive members will allow the emergence of agency cost. The cost is loosely enforced by the highest governance body without control from the body. Colletti

et al. (2005) claimed that the control systems need to be strong enough to maintain the cooperation between collaborators. The control on practices is intense through specific reporting disclosure. In the third gradient, where RL is low even the lower magnitude of SR occurs because the basic measurement is erroneous and allocation is improper, so the purpose of the EA is not achieved.

Lastly, the gradient four shows low RL against high SR. In the long term, the goal will be achieved. But, this may not possible happen due to the fact that there is no compensation for the management engaging long-term practices. Kuang and Moser (2009) found that employees will either reject the latter contracts or accept the contracts and reduce efforts because of no reciprocity.

RECOMMENDATIONS

Based on the above discussion, the authors recommend that personnel cost such as remuneration should be considered in environmental accounting practices. However, it is suggests that further research is needed to assert behavior management on ED sustainable. Hence, sustainability of the environment can be associated with a supported motivation of remuneration. Using a proper theory such game theory and the business enterprise theory, further research can be conducted for measuring remuneration level associated with performances (financial and comprehensive disclosures on EA). Furthermore, this behavior can constitute the base of earnings management behavior. Thus, conservatism principle is required in determining the amount of costs, taking the sustainability of the activities into account that provide long-term positive effects for the company.

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Exposure to Entrepreneurial Activities and the Development of Entrepreneurial Culture

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Abstract

Exposure to prior entrepreneurial activities has been found by many studies to influence people's mindset towards starting their own businesses. However, while much research on exposure to prior entrepreneurial activities have been carried out in terms of family businesses, limited research have focused on the use of entrepreneurial exposures through trade fairs and entrepreneurial events carried out by government agencies to aid the development of entrepreneurial culture. Using a descriptive study, 195 participants of entrepreneurship programmes offered by the government in Akwa Ibom, Nigeria were examined and findings reveal that to a large extent, exposing individuals to entrepreneurial activities using trade fairs and entrepreneurial events does aid in the development of entrepreneurial culture in Akwa Ibom, Nigeria. The findings contribute new knowledge to the entrepreneurship literature in terms of the use of trade fairs and entrepreneurship events to stimulate business startups.

Keywords: Entrepreneurial Activities, Entrepreneurial Behaviour, Entrepreneurial Culture.

INTRODUCTION

Entrepreneurial Culture is a society that depicts the exhibition of entrepreneurial attributes, entrepreneurial values, entrepreneurial mindset and entrepreneurial behavior among the citizens of such a society which propels them towards entrepreneurship (Brownson, 2013). Given various government interest in the promotion of entrepreneurship to reduce the rate unemployment, can such a society as described above be developed through the use of trade fairs and entrepreneurial events?

Exposure to prior entrepreneurial activities has been found by many studies to influence people's mindset towards starting their own businesses (Peterman and Kennedy, 2003). Many researchers have indicated that prior family business exposures constitute a powerful socializing influence on the values, mindset, and behaviours people adopt over the course of their lives (Carr and Sequeira, 2007). Krueger (1993b) asserted that a family firm should strongly influence its family members in their perceptions of entrepreneurship. In his work of 1989, he pointed out that entrepreneurial mindsets and intentions are significantly linked to broad measures of exposure to small or new ventures. He further highlighted the usefulness of Shapero's process model of decision to initiate a new venture which argued that exposure to entrepreneurship is one potential influence resulting in situational intentions and attitudes toward entrepreneurship. Drawing furthermore from Self-efficacy theory, Krueger (1993b) asserted that limited experiences with entrepreneurship may substantially influence how one

thinks about entrepreneurship. Citing from Elder (1991), Krueger (ibid) enumerated that entrepreneurial attributes change overtime especially in a course of important life event hence prior exposures can influence attributes.

Krueger (1993a) also acknowledged that prior entrepreneurship related experiences should influence entrepreneurial intention indirectly through the perceptions of feasibility and desirability. He found support that the feasibility element of attitude was significantly associated with breadth of prior exposure and desirability element of attitude was significantly associated with the positiveness of that prior exposure. Carr and Sequeira (2007) found significant direct and indirect effects of prior family business exposure on entrepreneurial intent, through the mediation variables of attitude towards business ownership, perceived family support and entrepreneurial self-efficacy. Krueger (1993b) found support for his hypotheses that exposure to family business raises intentions to start a venture; he found support that exposure influences positive attitudes towards entrepreneurship, he confirmed that exposure leads to significant differences in entrepreneurial attributes thus concluding that exposure to entrepreneurial activity does seem to change people (pp.83).

Although Drennan et al.'s (2005) finding was contrary to Krueger's (1993a) study, they however concluded that family business influences may only increase the attractiveness of self-employment but not necessarily the feasibility. However, while these studies have mainly focused on entrepreneurial exposures in relation to a family member, relative, friends or working in someone else's business, the focus in this study is on the entrepreneurial exposure activities of the government via its agencies to promote entrepreneurship. These activities involve the use of mix of instruments such as the media. Lundstrom and Stevenson (2005) have pointed out that the use of entrepreneurial events and trade fairs as forms of exposure to entrepreneurial activities can aid in the fostering of Entrepreneurial Culture.

METHODS

A pilot test was first undertaken in three government agencies in Akwa Ibom State to investigate the types of entrepreneurial exposures used by the agencies in the entrepreneurship promotional measures. Thereafter, a posttest- only design with non-equivalent groups was later used in the study due to its suitability in settings that does not lend itself for experiments (Agodini and Dynarski, 2004). Using purposive sampling method with a structured questionnaire, data was collected from 195 respondents who participated in the government entrepreneurship programmes. Descriptive statistics was used to analyze the data.

Preliminary findings from the Agencies

The findings from the pilot study of the agencies showed that the three agencies were involve in exposing individuals to different forms of entrepreneurial activities as shown on table 1 on the next page.

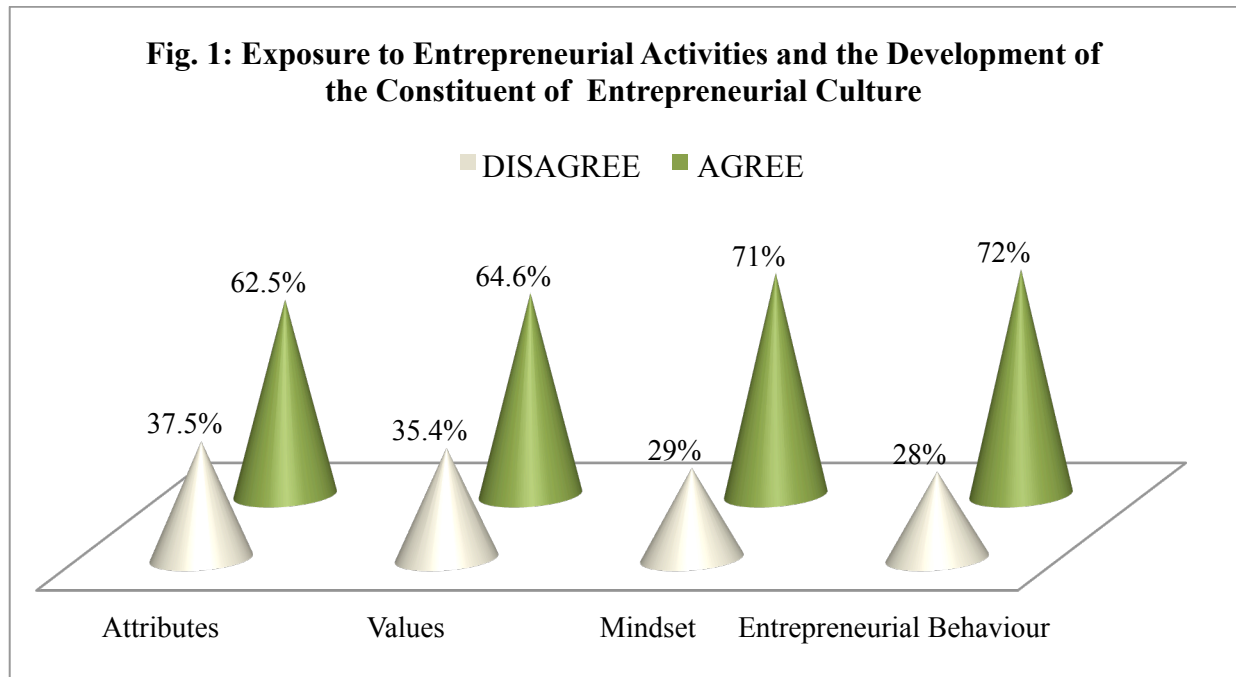
Was collected from 195 respondents who participated in the government entrepreneurship programmes. Descriptive statistics was used to analyze the data. The agencies exposed individuals in the state to various entrepreneurial activities such as; trade fairs, hands on workshops/seminars, business events, excursions and exhibitions. Individuals were made aware of these events through the state (Akwa Ibom State Broadcasting Corporation -AKBC) television, radio, newspaper, seminars, and banners among others.

Table 1: Exposure to Entrepreneurial Activities by Government Agencies

	Agency A	Agency B	Agency C
Exposure of individuals to Entrepreneurial Activities	Yes	Yes	Yes
Type of entrepreneurial activities individuals are expose to	Trade fairs, Hands on Workshops/Seminars, letters/phone	Business events, Trade fairs, Hands on Workshops/Seminars, Visitation to business facility (Excursions) and Exhibitions	Business events, Hands on Workshops/Seminars, and Excursions
Medium used to contact individuals for such exposures	letters/phone	AKBC TV, NTA Uyo, AKBC Radio, Pioneer Newspaper, Flyers, Workshops/Seminars and Banners	AKBC TV, AKBC Radio, Pioneer Newspaper, Flyers and workshop/Seminars

Analysis

The result of the descriptive analysis as shown in fig. 1 below indicates a full support for the proposition that exposure to entrepreneurial activities provided by the government agencies aids in the development of the constituent of Entrepreneurial Culture. The result shows that individuals who participated in the exposure programme agreed to the fact that the exposure to entrepreneurial activities by the agencies did to some extent contribute to the fostering of the constituent of their entrepreneurial culture since the percentage of respondents who agreed to its impact on their Entrepreneurial Attribute (62.5%), entrepreneurial values (64.6%), entrepreneurial mindset (71%), and entrepreneurial behaviour (72.2%) was a bit high compared to those who disagreed as shown on fig. 1 above. 87% of the respondents found the activities provided by the government agencies useful. This result corroborates the pilot study findings in which the respondents in the agencies agreed that the entrepreneurial activities carried out by them did aid in the nurturing of the entrepreneurial attributes (79%), values (62%) and mindset (80%) of the participants of the activities.



DISCUSSION OF FINDINGS

The aim of this paper was to examine the underlying assumption that exposure to entrepreneurial activities can aid in the development of the constituents of Entrepreneurial Culture with a particular focus on the exposure to entrepreneurial activities provided by the government via its agencies.

This result suggests that exposure to entrepreneurial activities may likely nurture all the constituent of entrepreneurial culture thereby tackling the unemployment situation in the state as more self-employed individuals may emerge due to the benefits derived from the policy measures. These findings are new in approach and context of the study although prior research has examined similar issue in relation to family businesses (Krueger, 1993b) hence; additional knowledge is added to the entrepreneurship literature in this respect. The findings slightly confirm Lundstrom and Stevenson's (2005) assertions that the use of entrepreneurial events and trade fairs as forms of exposure to entrepreneurial activities can aid in the fostering of entrepreneurial culture especially as shown by the findings in the descriptive analysis.

The finding of the relationship between exposure to entrepreneurial activities and entrepreneurial attributes confirms Krueger's (1993b) assertion that exposure leads to significant differences in entrepreneurial attributes thus changing people. The finding of the relationship between exposure to entrepreneurial activities and entrepreneurial values corroborates Carr and Sequeira (2007) who reported that prior family business exposure constituted a powerful socializing influence on the values people adopt over the course of their lives. This implies that over the course of the participants' lives within the period under study, there is the likelihood for them to have a change of their entrepreneurial values due partly to the exposures they have received from the policy measures organized by the government agencies. The finding of the relationship between exposure to entrepreneurial activities and entrepreneurial mindset corroborates Schwarz et al. (2009), Peterman and Kennedy (2003), Carr and Sequeira (2007) and Krueger (1993b) who reported that exposure to entrepreneurial activities influences people's attitude towards starting their own businesses. The findings of the relationship between exposure to entrepreneurial activities and entrepreneurial behaviour is a new finding and contributes to the entrepreneurship literature in that there is that

possibility that exposure to entrepreneurial activities may likely influence participants of such activities to start their own business.

CONCLUSION

The objective of this study was to examine how exposing individuals to entrepreneurial activities carried out by government agencies could aid nurture their entrepreneurial culture. Through the descriptive analysis used, it can be concluded that exposure to entrepreneurial activities does to some extent aid in the nurturing of entrepreneurial culture of individuals who participates in such exposures. The result of the analysis did to some extent confirm the pilot findings from the agencies responsible for the implementation thereby adding credibility to the findings of the analysis. The findings add new knowledge to both the entrepreneurship and public policy literature in that, government intervention to promote entrepreneurship is not a wasted effort but should be encouraged and appropriately planned and executed.

It can thus be concluded that from the descriptive perspective, exposure to entrepreneurial activities does to some extent contribute to the fostering of participants' entrepreneurial attributes, values, mindset and behavior which are the constituent of entrepreneurial culture.

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Impact of Perceived Discrimination and Resultant Stress on Innovative Work Behavior Moderated By Spirituality among Female Employees in Private Banks of Rawalpindi

Samreen Fatima Malik
Advance Research Methodology

Abstract

The objective of this research paper is to investigate the negative effects of perceived discrimination in the form of workplace stress on employee innovative work behavior among the female employees working in banking sector of Rawalpindi. Using a time lagged design, the effects of PD and its corresponding stress was tested on IWB, moderated by spirituality. Analyses involved data collected from 170 female's bankers. The results show that PD was positively related to workplace stress while workplace stress negatively affected IWB. As hypothesized, moderating effects of spirituality on stress to IWB were verified wherein it was proved that spirituality can mitigate the negative impact of stress on IWB. Therefore, we can conclude that fair treatment and better self-esteem improves productivity among employees. The study of moderating influence of Spirituality in Pakistani environment has proved to be a helpful contextual factor in buffering stress and promoting a healthy and productive work environment.

INTRODUCTION

The innovation plays a very important and central role in the long term survival of an organization (Ancona & Caldwell, 1987). Since innovation is characterized by discontinuous activities rather than unique, successive stages (Schroeder, Van de Ven, Scudder, & Polley, 1989), individuals can to be expected to be involved in any combination of these behaviors at any given time. Innovation is the production and generation of useful ideas and idea execution (Kanter, 1988; Van de Ven, 1986). Thus, innovation also involves the adaptation of products or processes from outside an organization.

Empirical evidences have shown a strong link of employees' innovative work behavior with desirable organizational outcomes. For example, IWB has been proved as the key antecedent to productivity, competitive advantage and organizational effectiveness. The critical nature of IWB motivated various researchers to know the factors help to encourage innovative work behavior among employees and also to know the factors postulating hindrances towards innovative work behavior. For example, personality types, leadership style, working environment and group cohesion has been proved as the key causes of innovative work behavior (Kanter, 1983; Pelz & Andrews, 1966). Whereas, abusive supervision, job stressors and workload have been characterized as the key hindrances towards innovative work behavior (Hon, 2011; Hon and Leung, 2011).

Workplace stress has been highlighted as an obstructing cause impeding creativity and out of box approach (O'Neil and Davis, 2010). Employees working in stressful environment spend their energies in buffering stress and eliminate causes of stress. Specifically considering women who are perceived to be emotionally weak, may be more vulnerable to stress. They are

more likely to be exposed to gender discrimination from male officers and supervisors, which may increase their level of stress and burnout (Martin, 1992). Especially in developing countries marked high at power distances, women have to struggle in all spheres of life. Ellison and Genz (1983) found that features of the work organization were particularly stressful for female officers. They are more likely to be discriminated during hiring, performance evaluation, and responsibility sharing and career progression. In nutshell, workplace discrimination is a key cause of stress which curtail their creativity. On the other hand, they are considered to be equally innovative same as their male counterparts but workplace factors may limit their innovative work behavior.

Various authors have recommended to explore factors that could buffer the adverse impact of stress towards favorable outcomes (Sheldon Cohen, 1983). Previously, social, peer and supervisor support have been figured out as common neutralizers of stressful events. Spirituality and religiosity have also been endorsed as vital factor to buffer stress. This study examines the role of spirituality as moderator on the stress to IWB relationship. Muslims are perceived to be relatively more religious in nature. Therefore, spirituality in Pakistani environment may be a helpful contextual factor to mitigate stress. In sum this study is going to contribute in the following ways;

- It takes up the important topic of female discrimination in a male dominated society which needs attention from policy makers.
- It studies the buffering effects of spirituality on work place stress to IWB.
- It focuses on female population working in banking sector of Rawalpindi
- The study examines the postulated relationships in a developing country. Various authors have contended that the research implications and findings originating from the developed world cannot be generalized to developing countries by disregarding the cultural dissimilarities. There exist a strong need to examine the antecedents and outcomes of job satisfaction within different societies to understand differences and similarities. Countries and societies across the world are commonly different on account of norms, values and other cultural dimensions. Therefore, the research findings cannot be generalized to other setting particularly when the cultural dissimilarities are high (Hofstede, 1993; Drory and Vigoda-Gadot, 2010; Tsui, Nifadkar and Ou, 2007). Since most of the studies on job satisfaction are conducted in western and other developed countries. Therefore, this study is a contribution from the developing country with different socio-economic structure.

LITERATURE REVIEW

Innovative Work Behavior

Creativity is the term used to explain the development of new ideas while innovation has more to do with the adoption and application of useful ideas (Scott, 1994). The results of study conducted on the impact of personality traits on innovative work behavior shows that openness and willingness to experience new ideas has greater impact on individual innovative work behavior (Yesil, 2013). The concept of innovation was evolved with the structural contingency theory by Burns & Stalker (1961) which suggested that consistent demand led to the mechanical organization while a changing demand developed the need for an organic organization which was based on innovation and creativity. In organizations, supervisors having a positive and healthy relationships with their subordinates in the form of trust and independence have shown conducive environment for innovation (Scott, 1994).

In banking sector, research has shown that equal and justified interpersonal treatment encourage innovation and creativity. Therefore, employees having higher levels of self-esteem

are found to show more innovative capabilities than those with lower level of self-esteem (Ojedokun, 2012).

Work Place Stress

The research on workplace stress can be explained by the phenomenon of 'Burnout'. Burnout is a distinctive stress condition which includes emotional fatigue and reduced individual achievement (Cordes, 1993). It is observed that the phenomenon of workplace stress in relation to employer and employee is a complex one. However, psychological abnormality is found to be an important problem in organizations. (Tennant, 2001). Burnout is found to be common in workplace. Team work and positive employee feedback can help in keeping workers satisfied (Iacovides, 2003).

Abusive supervision can affect the employee. Therefore, eradicating all forms of abusive supervision is important and should be the prime objective of management (Harvey, 2007). It is observed that employee burnout increases with the increase in the time spent with the co-workers (Erickson, 2001).

Perceived Discrimination

Aggressive interpersonal attitudes are found to lower the level of job satisfaction and may reduce employee motivation to show innovative work behavior (Ojedokun, 2012). It has been proved empirically in the research on glass ceiling effect that the wage discrimination on the basis on gender is more pronounced on the upper side of wage distribution (Jellal, 2008). However, research also suggest that when employees are convinced with the presence of discrimination in the organization, their belief in fair promotions are decreased which also further decrease their perception for positive career growth (Foley, 2002)

Perceived Discrimination Causing Workplace Stress

Research support the evidence that female employees are found to leave an organization more often than males which is attributed to glass ceiling effects (Stroh, 1996). There is evidence suggesting strong link between job stressors and work place discrimination among female workers. This has implications not only for female workers but also the employers as work related stress affects physical and mental health thus reducing productivity (Pavalko, 2003).

Hypothesis 1: Perceived discrimination can cause work place stress.

Work Place Stress Influences Innovative Work Behavior

Role ambiguity and situational constraints should be addressed by managers as they are important stressors in workplace. In order to remove the negative effects of work stressors, organizations should provide the employees with the essential tools and technology to enhance effectiveness (Gilboa, 2008).The motivation of an employee to show innovative behavior depends on perceived self-value and anticipated fair treatment from supervisors and co-workers. Therefore enhancing organization based self-esteem and increasing fair treatment among employees can enhance their innovative work behavior (Ojedokun, 2012). Therefore, we can conclude that fair treatment and better self-esteem improves productivity. On the contrary, absence of these factors may lead to less productive and innovative work environment.

Hypothesis 2: Work place stress negatively effects innovative work behavior.

Mediating Role of Stress

Work place stress has been used as mediator in the relationship between ethical leadership and leadership effectiveness and employee turnover intentions. It is observed that employees loyal to their leaders have lower intentions to leave job due to decreased work related stress (Elçi, 2012). In a study on mentoring and job attitudes, role stressors is used as mediator. Stressors in the form of role conflict and role ambiguity are studied and are found to be inversely related to job satisfaction and organizational commitment (Lankau, 2006). In a study on burnout resulting from inequity, the impact of job stress was studied. Wherein, it is discovered that burnout due to inequity can partly be explained in terms of job stress (Taris, 2001).

Thus the evidence supports the following hypothesis:

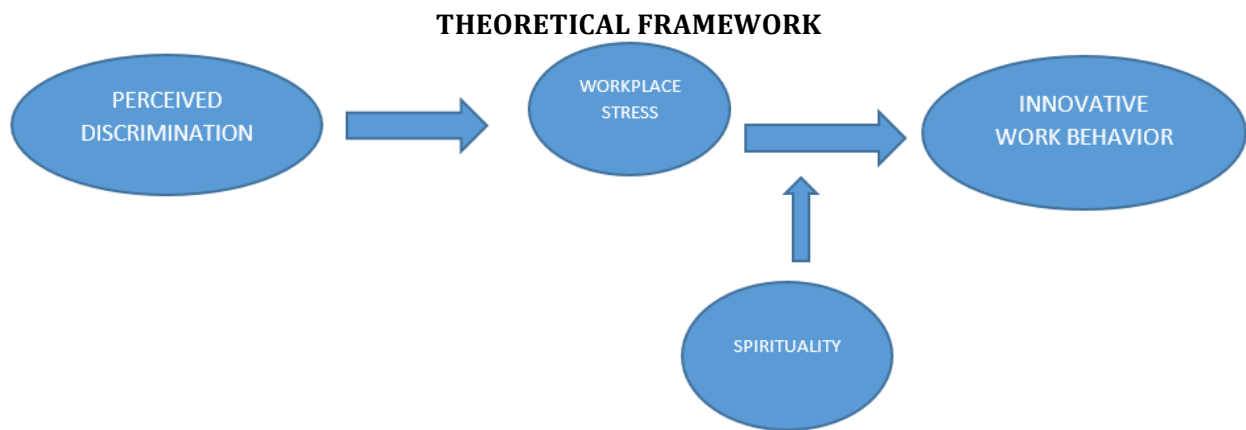
Hypothesis 3: Work place stress can mediate the relationship between perceived discrimination and innovative work behavior.

Moderating Role of Spirituality

In a study investigating the moderating effects of religious and spiritual factors in relation to perception of stress and psychological well-being, it is found that higher the spirituality lower will be the levels of psychological distress symptoms (Lee, 2007). Similarly a study on job overload and job satisfaction with spirituality used as moderator concluded that different dimensions of spirituality helps one in getting focused and achieving ones goals in life. Thus being satisfied makes the employees more creative and innovative (Altaf, 2011). Spirituality has significance in workplace as employees want to develop meaning through their work in terms of longing for respect and self-worth. Thus, when employees find that their spiritual needs are fulfilled, they work whole heartedly and show more commitment to the organization (Rego, 2007).

Thus, the evidence supports the following hypothesis:

Hypothesis 4: Spirituality can moderate the negative effects of workplace stress.



METHODOLOGY

Subject/Sample:

The purpose of this study was to examine the effects of Perceived Discrimination on Innovative Work Behavior of female employees working in different organizations. This study is confined to the females working in the officer grades as they are more vulnerable and exposed to discriminating behaviors of senior employees or supervisors while those at the senior positions are less exposed to such behaviors. Female officers may be exposed to gender discrimination from supervisors, which may in turn increase their levels of work stress and

burnout (Martin, 1992). Haarr (1997), for example, found that female officers experienced that their male partners provided inadequate backup and often questioned about their abilities.

Procedures:

Questionnaire survey was conducted to collect the data through purposive study. The questionnaire contains information about the confidentiality and significance of the study. Data collection through questionnaire survey will be entered and analyzed using SPSS 20.0.

The data for this study has been collected from two sources; supervisors as well as subordinates, with a time lag of thirty (30) days between them for the purpose of better understanding of the Constructs of our research paper. Three hundred questionnaires were distributed with 180 returned. The final sample included one hundred and seventy (170) complete questionnaires, after removing 10 due to missing/erroneous data. In case of age, 28.8% of respondents were in the range 21-25 years, 29.4% were in range 26-30 years, 27.6% were in range 31-35 years, 5.8% were in range 35-40 years and 8.2% were above 41 years of age. As regard education level, 5.8% were Intermediate pass, 32.3% were bachelors while 61.7% had masters degree. With respect to years in organization, 20% had less than one year, 32.3% had 1-5 year, 33.5% had 6-10 year and 14% had more than ten years' experience. As regards designation in organization, 2.94% were contractual, 3.52 % were grade three, 34.7% were grade two while 58.8% were grade three officers. .These demographics show thoroughly represented estimate of the population of interest.

This is a time-lag study with data collected in two time lags. Employees filled the questionnaires for perceived discrimination, stress and spirituality while supervisors filled the questionnaire about perceived discrimination and IWB.

MEASURES:

Workplace Stress:

A modified version of the College Student Life-Event Scale (CSLES) was used as a measure of stressful situations; the original scale was developed by Levine and Perkins (1980). This scale is composed of 99 items that represent events that fall into 14 different categories. Stress, the mediating variable which is caused by Perceived Discrimination will be measured with the help of this scale. The scale is based on a five point Likert Scale from 1(Never) to 5 (Very Often). Cronbach's alpha reliability of the Workplace Stress measure was .86.

Innovative Work Behavior:

The 14 items developed in our research have been adopted from the research on IWB by Kleysen and Street, (2006) based on their "Two dimensional measure on innovative work behavior". The IWB which is the Independent variable that was measured by 14 items measuring different forms of IWB reflected in the performance of employees. The scale is based on a five point Likert Scale from 1(Never) to 5 (Always). Cronbach's alpha reliability of the IWB measure was .96.

Spirituality:

The 16 item scale was developed in combination with inputs from the National Institute on Aging/Fetzer working group and is adopted from the research paper by Underwood and Teresi on Annals of Behavioral Medicine, the objective is to have a set of items to compliment other fields in the multidimensional instrument. The scale is also based on a six point Likert Scale from 1(Never or almost never) to 5 (Many times a day). Cronbach's alpha reliability of the spirituality measure was .99.

Perceived Discrimination:

These items are adopted from the research paper, 'Prevalence and correlates of perceived workplace discrimination among older workers in USA', (Chou & Choi, 2011). This variable is measured by the aggregate score of a scale of six items, representing six types of workplace discrimination. Examples of items include, "unfairly given jobs no one else wanted, watched more closely at job than others and co-worker with less experience and qualifications promoted before you". Each item is measured on a five-point Likert-type scale (1=never, 2=less than once a year, 3=a few times a year, 4=a few times a month, 5=once a week or more). Cronbach's alpha reliability of the PD measure was .90.

ANALYSIS

RESULTS

Table 1 Means, Standard Deviations, Correlations, and Reliabilities

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1 Education	2.63	0.59	1					
2 Designation	4.53	1.094	0.11	1				
3 Perceived Discrimination	2.51	1.12	-0.07	-0.03	(0.909)			
4 Spirituality	4.51	1.03	-0.10	.026	-	(0.992)		
5 Stress	3.22	0.55	0.161*	0.11	0.282**	0.595**	(0.864)	
6 Innovative Behavior	4.05	0.87	-0.12	.269**	-0.09	.471**	0.255**	(.963)

**p<0.01; **p<0.05; N = 170; Cronbach's alpha presented in parenthesis*

Table 2. Results of hierarchical regression analyses.

Predictors	Mediator Variable : STRS			Dependent Variable : IWB		
	β	R ²	ΔR^2	β	R ²	ΔR^2
<i>Direct Effects</i>						
Step-I						
Control Variables		0.033			0.093	
Step-II						
PD	0.299***	0.122		-0.099	0.102	
<i>Indirect Effects</i>						
Step-I						
Control Variables					0.093	
Step-II						
STRS				-.265**	0.164	
Step-III						
PD				-0.019	0.164	

Note. N = 170. PD = Perceived Discrimination; STRS = Stress, IWB= Innovative Work Behavior

* p < 0.05; ** p < 0.01; *** p < 0.001

Table-3 Results for Main Effects and Moderated Regression Analyses

	Innovative Work Behavior	
	β	ΔR^2
Step 1		
Education	-.125	
Designation	.286***	
Step 2		
Education	-.097	
Designation	.268***	
Stress	.003	
Spirituality	.455***	
Step 3		
Education	-.092	
Designation	.233***	
Stress	-.338**	
Spirituality	-.097	
STRSXSPRTY	.536***	

Note. $N = 170$. STRS = Stress; SPRTY = Spirituality; IWB = Innovative Work behavior.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 1 shows the descriptive statistics, bivariate correlations and the alpha reliabilities. Table 2 shows the regression analysis for mediation.

Descriptive Statistics and Correlations:

Table 1 shows the descriptive statistics, bivariate correlations, and the alpha reliabilities. Correlations of Stress with PD was ($r = 0.282$, $p < 0.05$), with Spirituality ($r = -0.59$, $p < 0.05$), thus significant and in expected directions. Correlations of IWB with PD ($r = -0.09$, n.s.), with spirituality ($r = 0.47$, $p < 0.05$) and with stress ($r = -0.25$, $p < 0.05$), were also in expected directions.

Our first hypothesis states that perceived discrimination causes workplace stress. Results in the table supports the hypothesis as a positive relation is found between perceived discrimination and workplace stress as indicated by regression coefficient ($\beta=0.299$, $p < 0.001$). Our second hypothesis states that workplace stress negatively affects innovative work behavior. Results in Table 2 supports this hypothesis by showing a negative and significant relation between stress and innovative work behavior as indicated by regression coefficient ($\beta=- 0.265$, $p < 0.01$).

Our third hypothesis states that workplace stress can mediate the relationship between perceived discrimination and innovative work behavior. In order to verify this relationship, a four step Barren and Kenny (1986) method was adopted. In the first step PD was regressed with IWB and the relationship was insignificant ($\beta=- 0.099$, $p = 0.184$). In second step, PD was regressed with stress and the relationship was found to be significant ($\beta=0.299$, $p < 0.001$). In the third step, the mediating variable stress was regressed with IWB and a significant negative impact was found ($\beta=- 0.265$, $p < 0.01$). In the fourth and final step regression was performed when PD was regressed with IWB controlling the impact of stress and an insignificant impact was found ($\beta=- 0.019$, $P > 0.05$).

Table 3 shows the results of moderation analysis. Moderated regression analysis (Cohen et al. 2003) was used to test our fourth Hypotheses that spirituality moderates the negative impact of workplace stress. For this purpose, we centered the independent and moderating variables. Education and designation as control variable were entered in the first step. Independent and moderating variables were entered in the second step. In the third step, product terms of independent and moderator variables (Stress*Spirituality) were entered, which if significant confirmed moderation. Results in Table 2 show that the interaction term was significant showing ($\beta = 0.536$, $p < 0.001$), thus confirming moderation test. Thus our fourth hypothesis is proved wherein spirituality moderates the relationship between stress and IWB.

DISCUSSION

The objective of the study is to explore a relationship between perceived discrimination and innovative work behavior mediated by workplace stress. The moderation effect of spirituality was tested in order to buffer the negative effects of stress on innovative work behavior. This study is inspired from past researches as well as real time experience. In past researches the impacts of glass ceiling on the wage distribution have shown its effects on upper or managerial level employees (Jellal, 2008). This has focused our research to explore the impact of gender discrimination in lower level female employees. Foley (2002) suggest that perceived discrimination among employees decrease their belief in fair and justified promotion system and consequently influencing their career growth. Thus, a positive career growth in an evolving organization requires changes, creativity and innovation to meet the pace of other organizations. In a country like Pakistan, the glass ceiling effects are found to be more pronounced among females working in non-managerial position. However, in order to study these observations, a research was conducted and the relationship was explored empirically. The purpose of this research was to explore if PD in workplace leads to stress which is supported by past evidences wherein female turnover was found to be related to glass ceiling effects (Stroh, 1996). Similarly we were interested to find if the corresponding stress further effects productivity. (Pavalko, 2003) found that workplace stress effects physical and mental health which reduces productivity and output. However, in a relatively religious society of Pakistan, spirituality can mitigate the negative effects of stress. (Rego, 2007) found that spiritually satisfied workers can be more productive and committed to the organization.

The results of the current research show a positive and significant relationship between Independent variable, Perceived Discrimination and the Mediator, Workplace Stress. These results support the past studies where a significant relation exists between job stressors and work place discrimination among female workers (Pavalko, 2003). While a Negative and significant relation is found between the mediator Stress and dependent variable Innovative work behavior. This result supports the evidence that Burnout which is a form of emotional fatigue reduces individual achievement (Cordes, 1993).

The results of moderation test show a significant value of spirituality jointly effecting with stress on Innovative work behavior. This result supports the past research wherein the spiritually strengthens employees making them more satisfied and focused in their job resulting in more creativity and innovative work behavior (Altaf, 2011). The significant value of interacting variables stress and spirituality is also in line with past researches wherein it is found that spirituality can mitigate the psychological distress symptoms (Lee, 2007).

In comparing our unique setting of organization in Pakistan with that of a Western organization, we assume that the findings can be generalized in other more developed

economies as the perceived discrimination is found to be particularly low in this urbanized area of Pakistan. However, we couldn't find any past study with the same variables.

Theoretical Implications:

Direct relationships are also your contribution, as it helps to extend applicability of existing established relationships. The current study has contributions to the existing researches conducted in the same area. First we have explored the relationship of perceived discrimination with workplace stress and the findings confirm a negative relationship. Second, we conceptualized the effects of stress on innovative work behavior with the moderating or buffering effects of spirituality. The findings show that spirituality can buffer or lower the negative influence of stress on innovative work behavior.

Practical Implications

The current study has implications on the managers or supervisors in the banking industry. The study brings attention to the discrimination faced by the female junior level staff. If they are treated fairly, they can show better motivational levels and can show better results in the form of more creativity and innovation. However, as psychological abnormality or stress is found to be an important problem in organizations (Tennant, 2001), spirituality can help the females cope with the negative effects of emotional stress.

Practical implications to the managers include efforts to help cope the female staff with discriminating practices so that females are free from stress and perform at par with their male counterparts. Also spirituality must be appreciated at workplace by hiring spiritually high staff and provide trainings to inculcate spirituality. Thus top management must inculcate more justified rules and regulations in their policies.

Strengths, Limitations and Future Directions

The study has focused on the female staff working in lower or subordinating positions in banking sector, thus being more vulnerable to discriminating behaviors by the supervisors. This if applied practically, this study can have long lasting implications.

There are some limitations in this study as it focused the females in banking in the area of Rawalpindi. Thus the scope of this research is limited to the geographical location and female population of the locality. The research is based on cross sectional data and therefore has its limitations. Some of the measures were self-reported therefore there are chances for common method biasness

The future researches should include a wider geographical area and include a bigger population. As Pakistan has a unique culture and society values, therefore more researches should be conducted on the employee issues of this geographical location.

Future studies may be conducted with other mediator such as burnout or psychological distress in order to explore the effects of PD on mental health. Similarly other possible moderators may include social support, religiosity and environment. Future researches should include actual reading about reported cases of discrimination. Longitudinal study should be conducted in order to obtain more precise results.

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Balancing Conflicting Supply Chain Stakeholder Interests: The Big Procurement Practitioner's Dilemma

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Abstract

Effective Supply chain management practices dictate fair and balanced treatment of all critical players in any organization's supply chain for better performance. Each of the players has their interests though occasionally some are shared; this scenario puts the position of the procurement professionals at cross roads with buyers and suppliers as they implement their employers' objectives within a regulated environment. The paper explores the dilemma created by variant stakeholder interests in the procurement system and proposes a consultative and trade off approach for procurement professional so as to achieve desired goals. The researchers surveyed all 74 procurement professional who attended the first KISM procurement research forum held at New Stanley hotel in Nairobi in June 2014, opinions were sorted using semi structured questionnaires and analyzed using SPSS. The study focused mostly on public sector procurement practitioners since the stakeholders are similar as stipulated by the existing legal framework, private regulations mostly vary from organization to another depending on governance and positioning of procurement. Majority of the procurement professionals cited balancing of variant stakeholder interests as their biggest challenge.

Key Words: Dilemma, collaboration, sustainability, Procurement Practitioner.

INTRODUCTION

In many developing economies procurement profession is treated as a "back-office" function, not much has been done to explore and address challenges facing the Procurement professionals (Takuta, M. & Saruchera, 2015). The researchers in their study titled "challenges facing procurement professionals in developing economies: unlocking value through professional international purchasing"; limited recognition, increasing unethical behavior, poor supplier delivery, poor regulatory environment, varying supplier standards and poor corporate governance were identified as the main challenges faced by procurement profession in developing countries. Procurement has become an integral part of organizational performance and it is drawing increased attention from top to lower management levels. Despite shrinking budgets, procurement professionals are responsible for spending a huge proportion of companies' revenues of national budget (Anton, Bogetoft & Thorsen 2007; Levaggi 1999). The term Stakeholder has become increasingly important as an integral part of the procurement process. Effective Supply chain management practices dictate fair and

balanced treatment of all critical players in any organization's supply chain for better performance.

The key drivers of supply chain performance are infrastructure, technology, information and people. The people aspect comprises of buyers, suppliers and the organization's people (business owners and managers). The people are the most critical for they allocate and manage all the other drivers. Each of the players has their interests though occasionally some are shared, this is scenario puts the position of the procurement professionals at cross road with buyers and suppliers as they implement their employers objectives. Internally users view procurement professionals as procedural officers who rely on static laws to deny them timely necessary requirements. Sometimes the pressures may be too much to bear. The current public procurement sector in Kenya is riddled with all manner of accusations amongst stakeholders in the system. With all this the procurement practitioner is at the center stage. The pressure is too much sometimes depicting a worn out procurement practitioner who is stuck between two hard rocks (citizenry and the political machinery). The varying and conflicting stakeholders' interests are a real nightmare to balance notwithstanding the static legal framework. This poses the big question, how does the procurement professional mitigate through the dirty waters without being drowned?. It's against this background the researchers sought to identify the major conflicting supply chain stakeholder interests and the resulting dilemma.

OBJECTIVES OF THE STUDY

The paper sought to bring forth the role of procurement professionals in harmonizing stakeholder interests and proposes the safest strategy for procurement professionals to achieve harmony and support from the stakeholders in their supply chains.

STAKEHOLDER THEORY

Stakeholder theory suggests that the purpose of a business is to create as much value as possible for stakeholders. In order to succeed and be sustainable over time, executives must keep the interests of customers, suppliers, employees, communities and shareholders aligned and going in the same direction. Innovation to keep these interests aligned is more important than the easy strategy of trading off the interests of stakeholders against each other. Hence, by managing for stakeholders, executives will also create as much value as possible for shareholders and other financiers. (Financial times, 2014). In general, stakeholders are groups of people whose interests are considered to be most important for the overall success of a project. They have the capability to influence the project and receive both gain or lose from the success or failure of a system. According to Romenti (2010), stakeholders are considered social subjects who influence each other's perceptions, rather than isolated individuals who process information. Successful completion of projects is therefore dependent on meeting the expectation of stakeholders (Freeman, 2007). Project success and failure is directly related to its stakeholders' perceptions of the value created by the project and the nature of their relationship with the project team (Bourne, 2005). The success, or failure, is strongly influenced by both the expectations and perceptions of its stakeholders, and the capability and willingness of project managers to manage these factors and the organization's politics team (Bourne, 2005).

PUBLIC PROCUREMENT SYSTEM IN KENYA

The current Public Procurement system in Kenya is heavily regulated by various acts of parliament; key to these is the public procurement and Disposal Act 2005 and its regulations. This is the law that guides and supersedes all the other laws including international agreements on matters pertaining to procurement as long as public funds are involved (GoK, 2005). Others include the anti-corruption and ethics Act, The public private partnerships Act

2012, Chapter 6 of the constitution of Kenya etc. The legal framework has been cited as a stumbling block to government's service delivery more so on long timeframes stipulated for various procurement methods (Ndolo, 2014). According to Njagi (2014) the emergency of new procurement practices notably government to government procurement agreements and procurement proceedings being done above the board, preference and reservation clauses for the youth/women make the whole scenario more complex. Inter-professional conflicts don't ease the pressure either. This has led to controversial dismissal of senior officers, majority have pending cases in court or numberless registered complains to regulatory bodies. As most of the stakeholder's demands and interests sometimes conflict with each other, organization must set appropriate strategic goals and priorities to bring sustainability to meet these demands and interests. The ethical inclination of the procurement process should be viewed as the responsibility of all stakeholders notably; suppliers, donors, procuring entities, beneficiaries and the Kenyan citizenry. A continuously improved procurement system would be the preference of each of the stakeholders since it will help in mitigating challenges that keep on popping up. Success will be measured by the extent to which the public can see a significant increase in the quality of service delivery and achieve value for money.

KEY STAKEHOLDERS IN THE KENYAN PROCUREMENT SYSTEM

Effective stakeholder management is crucial to project's procurement success and it's really impossible to manage stakeholders if it's not known who they are and the motive of their involvement. Stakeholder can be classified according to their interest and power. Key stakeholders of the Kenyan procurement system include; The Government, legislature, regulatory bodies, procurement entities, procurement professionals, the citizenship, the courts, Activists and the media. The government sets the agenda by proposing to parliament approval of relevant legal framework geared towards a value based procurement system that is efficient and effective. These laws are usually aligned to the political agenda of the government of the day for example the drafting, passage and adoption of the preference and reservation clause in the procurement act promotes the jubilee's government goal of giving more opportunities to youth and women. The legislature debates and approves or rejects such proposal to laws. It is also mandated with the supervisory role of deciding on the effectiveness of the system. The effectiveness of such laws is subject to another discussion. Procurement professionals are the implementers of such laws. Regulatory bodies assist the procurement entities in the usage of the laws. The courts only get involved in the procurement process when claims of malpractices are reported by any of the parties to the system. The media and activists play the key role of creating awareness to the public on key laws, opportunities as well as malpractices in the public system. This has occasionally been viewed as antigovernment or existing procurement system.

METHODOLOGY

The study adopted an exploratory descriptive methodology due to the insufficiency of original research related to procurement issues in developing economies. The questionnaires were emailed to the respondents. A sequential process of combining the existing procurement literature with real-world practices was adopted. Data was collected using questionnaires and analyzed using descriptive statistics as shown in table 1 below.

RESULTS AND DISCUSSIONS

Response Rate

After sending out 74 questionnaires, 69 were properly filled and returned which represents a 93 % response rate which is adequate.

Table 1 below shows the descriptive statistics of the questionnaire results

Table 1: Descriptive Statistics

	N	Min	Max	Mean	Std. Deviation
Balancing varying stakeholder's interest is my biggest challenge in procurement	69	1.00	4.00	1.2754	.70469
My qualification help to meet stakeholder' interest	69	1.00	4.00	3.6667	.76055
Government regulation helps me to meet stakeholder's interest	69	1.00	4.00	2.3043	1.37525
Stakeholder's consultation helped me to meet stakeholder's interest	69	1.00	4.00	2.9275	1.56542
Trade-off is key in meeting stakeholder interest in procurement	69	1.00	5.00	3.5072	1.45140

Procurement professional's qualification and trade-off as means of achieving stakeholder interests had the highest means. This gives the variant views of the procurement professionals. The professionals' views on stakeholder consultation and trade-off had the highest standard deviation an indication of a wide range of the views from the procurement professionals. Balancing varying stakeholder interests received a mean of 1.2754 and standard deviation of 0.70469 the lowest and the least varying.

CONCLUSION

Based on the findings of the study, the following conclusion is drawn. The study reveals that procurement professional qualification, Trade-off and Stakeholder's consultation helped the procurement professionals meet stakeholder's interests. This is justifiable due to the extended democratic space, adoption of new project management practice that promotes stakeholder involvement. Many professionals are also back in class to improve on their skills hence the high rating of professionalism qualifications. Stakeholder consultation is also rated highly which is in line with stakeholder theory that while balancing stakeholder interests and government regulations assisted to a lower extend in meeting stakeholder interests. This can be attributed to the accusations that government regulations are an obstruction to efficient and effective public procurement in Kenya. This justifies the myriad court cases pertaining to flouting of procurement procedures for the officers don't seem to think government regulations help them in meeting stakeholder interests hence there is little chance of application.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made;

1. A consultative approach both by procurement practioners and policy makers should be adopted so as to win key stakeholder support in the procurement process.
2. Familiarization of public legal framework among stakeholders so as to mitigate some of the unnecessary stakeholder conflicts

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Presenting an Innovative Approach Combining FA and ANP Methods to Identify and Prioritize Water Pollutants in Petroleum and Petrochemical Industries

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Abstract

Water contamination is one of the important challenges and problems of the world and Iran. One of the main causes of disease and mortality in the world is water contamination. Surface and groundwaters are both subject to different contaminants. Considering the nature, origin of entrance of the pollutants, being natural or man-made, various classifications have been considered for contaminants. The major organic contaminants of water include agricultural, chemical, oil, and food contaminants. Each of these four groups has subcriteria. In this research, accurate investigation, identification, and ranking of water contaminants in all oil and petrochemical industries (urban area of Tehran province) have been dealt with using factor analysis and analytical network process methods. The results of factor analysis method suggest that the contaminants of nitrate, sodium, and TDH claimed the highest score by experts of environment in the field of water contamination. Furthermore, the results of analytical network process showed that agricultural contaminants with the weight of 0.321 stood in the first rank, while oil contaminants with the weight of 0.152 ranked the fourth.

Keywords: water contaminants, analytical network process, principal component analysis, factor analysis, oil and petrochemical industry

INTRODUCTION

Today as the demand market has become something central, it has resulted in development of the significance of supply chain such that it has changed into one of the vital instruments in commercial competitions. On the other hand, environmentalism has changed into an important commercial- social issue. Considering the significance of these two issues, green chain concept was developed and has attracted the attention of pioneering companies across the global competition. Today, the managers of leading companies try to benefit from improving their

environmental performance throughout the entire supply chain as a strategic weapon for gaining competitive advantage through developing utility and satisfaction throughout the entire supply chain (Razmi and Nasrollahi, 1392). Furthermore, the environment that has surrounded the human and allowed him to leave has been threatened by the human itself. Today, we live in a world in which the plight of environmental contamination due to the rapid growth of population, industry, and constraint of natural resources has become of interest to scientists and experts more than ever it has also been paid attention to by the public as a tangible issue. In today's societies, the significance of environmental protection seems to be something essential and evident. Undoubtedly, conducting and implementing any program requires sufficient knowledge and essential understanding of the environment and its contaminants. Currently, the environmental crises caused by the contaminations is threatening many countries seriously. Therefore, countries can control these environmental crises through serious and logical protection of their environment and scientific programs. In this regard, recognizing water contamination and the industries that develop these contaminations has facilitated the way to combating such contaminations (Ramudhin et al, 2010).

Tom Buchert et al (2015) presented development of sustainable product- advantages and obstacles in a research called multicriteria decision-making as an instrument for. In that paper, they merged discrete decision-making trees with lifecycle sustainability assessment (LCSA) for development of multi-criteria quantitative analysis. Further, to improve decision-making they have presented an integrated method for designing sustainable product. The main objective of the selected approach is covering the gap between prospective and retrospective decision-making through quantitative analysis in the preliminary stages of design. The final outcome of this research suggests that for developing sustainable products, design engineers can benefit from multi-criteria quantitative sustainable information which is currently available in the preliminary stages of product design. In another research, Cozzi et al dealt with spatial assessment for agriculture with the aim of increasing the productivity in terms of econometrics in Italy. In this research, which has been done in Basilicata region in Italy, for filtering the refuse resulting from chemical wastes, weighted average method has been used along with verbal quantifier. Accordingly, a suitable map for decreasing the products of a country which was far from chemical wastes and especially water wastes was recognized across the studied region. Based on geological and agricultural scales used in this research, the researchers found that out of the entire studied region, only 25 hectares of the 163 available hectares are cultivable. Furthermore, the results of this research confirmed the fact that if entrance of chemical wastes and especially the water contaminants are not prevented from being introduced into groundwaters of agricultural regions, these regions will be on the verge of devastation.

However, Lam and Dai (2015) used a combinational method of developing the quality performance and analytical network process for optimizing the providers of logistics to improve sustainability of green supply chain in order to lower water contaminants. In that research, they concluded that the most important determining factor of sustainability is economic and environmental issues (water contaminants). Martijn Bouwknecht et al (2015) assessed the hazards threatening production of fresh crops despite its green leaves throughout its supply chain in Europe. In that research, based on the studies on a wide range of environmental contaminants and especially water contaminants, they found that there threatening hazards are not merely a general health risk by viruses in foods which are important in supply-chain. Further, they cannot be coped with only through identification and evaluation of viruses in retail products. Accordingly, presentation of a solution in this regard is crucial. In this research, using a conceptual model earned through investigating the indices

affecting the quality of agricultural crops including the level of water contaminants such as phenol, nitride, ammonium, and the nitrate present in some foods cultivated close to chemical industries in several points of the member countries of the European Union, the negative effect of these contaminants on the quantity of products has been observed abundantly. The results of research on several specific products such as lettuce and soft fruits such as strawberry, in contaminated regions, when compared with cleaned regions, the quantity of these crops had a drop in quality by 97.5% and this reduction in the quality is due to liberating the contaminants of the current chemical industries in the region to agricultural farms.

The structure of this paper is as follows: Sections 2 and 3 deal with the significance and necessity of water resources and the present research. Section 3 deals with the methodology. In Section 4, the stages of the research are dealt with. Statement of the introduction of the effective criteria and subcriteria in the assessment process has been thoroughly discussed in Section 5. Eventually, Section 6 states the conclusion of the research.

THE SIGNIFICANCE AND NECESSITY OF PROTECTING WATER RESOURCES

Water is one of the most abundant compounds which is found in the nature and occupies almost 75% of the earth surface. However, several factors have contributed to water shortage across the world. The first factor is heterogeneous geographical distribution; over 97% of the entire water resources are found in oceans and seas, where due to the high level of soluble salts, they are not suitable for direct consumption (Alaimo, Peter & Amanda-Lynn Marshall). Over 2% of the entire water resources are present in glaciers and Polar Regions or are found as humidity in the soil and the earth's atmosphere. Due to unavailability, planning for using them is not justifiable in terms of economic feasibility. Thus, for survival and meeting industrial, agricultural, and drinking purposes, human beings can have access to only 62% of the water remain in the lakes, rivers, and groundwaters. This not only has reduced the quality of available water resources and brought about further limitations, but the resources have also faced decreased and altered quality of waters due to development of urbanization and industrial as well as agricultural activities. It is many years that it is investing in proper planning of management of water resources (Azadfallah, M., &Azizi).

THE ENVIRONMENT AND ENVIRONMENTAL CONTAMINATIONS AND THE SIGNIFICANCE OF THE RESEARCH

The environment refers to all environments in which life exists. A set of external physical factors and living creatures which are interacting with each other constitute the environment and influence the growth and behavior of creatures. Environmental protection in the 21st century is known as one of the eight objectives of the millennial development and one of the three pillars of sustainable development (Azadi et al, 2015). Natural environment is a combinational term from different sciences, which involves a set of biological and environmental factors in the form of environment and non-biological factors (physical, chemical) which influence the life of a person or species and are also influenced by them. Today, this definition is mainly related to human beings and their activities, where the environment can be summarized as a set of the natural agents of the earth such as air, water, atmosphere, rocks, plants, etc. which are surrounding the human. The difference between the environment and nature lies in the fact that definition of nature involves a set of natural, biological, and non-biological factors which are considered exclusively, while the term "environment" has been described based on the interactions between human and nature and according to their viewpoint (Lam and Dai, 2015).

The characteristic of the environment of modern business is ever increasing competition and economic globalization. Under such conditions, producers benefit from novel the strategies and

technologies to achieve the environment. Therefore, throughout the recent years, supply-chain management 3 has attracted the attention of both academics and industries as an effective business philosophy (Pishvae & Razmi, 2012). As green supply-chain methods 5 have developed a green revolution across the supply chain, companies should use their internal and external resources to implement the green supply-chain methods.

Contamination of water and underground resources with different contaminants brings about various environmental negative effects. The contamination caused by industrial activities has always brought concern for industry stakeholders and the Institutes supervising the environment. Selecting adaptive policies and logical solutions for cleaning the environment in a way congruent with environmental considerations is inevitable. Considering the effect of environment in the life and in turn human survival, protecting the environment is considered something essential. Therefore, to achieve this aim, recognition of the issues that contribute to environmental contamination seems to be evident, as the country has many industrial towns (production industries), thus understanding and being aware of the factors influencing environmental contaminations are considered to be important. Through this, these factors can be mitigated and for eliminating them some important measures can be taken to protect the environment. As water is not a consumer and worthless product. Today, water is a strategic and economic good which is very valuable and those who own it have bargaining power and are able to disturb political and regional equations. Furthermore, water shortage in dry and semidry regions, on the one hand, and wasteful and wrong consumption of water resources and their contamination on the other are serious threats for sustainable development and environmental protection.

Based on the points mentioned above and according to the previous studies, we achieved a study gap and absence of an efficient method for identification and prioritization of a variety of water contaminations in green supply-chain. Based on this fact, in this research attempts have been made to present a method with expert system design for identifying and prioritizing a variety of water contaminations in green supply-chain as an instrument for responding to the needs of the target population. Briefly, the novelties of this research include:

- in this research, it is predicted that major contaminants and their level in the Iranian oil and petrochemical industry and especially Tehran province are extracted and after presenting a mathematical model with the aim of decreasing environmental contaminants and presenting it to the relevant organizations, an effective step is taken towards preventing devastation of the environment of the development of contaminants this industry.
- As Iran is an oil-rich country and has many refineries and petrochemical industries along with relevant industries, the results of the above-mentioned plan can be used in these industries and other similar areas.

STAGES OF THE PROCEDURE OF THE RESEARCH

In this research, the methodology is of applied type, in terms of objective, while in terms of type, it is an assessment method based on questionnaire analysis in the real world; it can be put forward as a case study. Determining the input and output indices, obtaining and extracting the variables in this type of research itself are important parts of implementation of this research. The following steps were taken:

- Determining the criteria through the research background and PCA method
- Development of questionnaire
- Examining the reliability of the questionnaire
- Data collection

- Determining the validity of the items of the collective questionnaires
- Giving weights to the variables
- Analysis and ranking using ANP method

Principal component analysis (PCA)

Principal component analysis is one of the classic multivariate methods and perhaps their oldest and most famous method. This method was first developed to analyze the structure of variance-covariance matrices and correlation coefficient. As with many multivariate methods, prior to invention of computers, this method was not widely used due to complexity of calculations. Thereafter, in terms of theory and application, it was widely developed and employed. This type of analysis can be focused on from several perspectives.

- Conversion of dependent variables to uncorrelated variables
- Finding linear combinations with large or small relative variability
- Reduction of the volume of data
- Data interpretation

This type of analysis is not usually considered a final analysis, rather it is mainly used as an intermediate tool for further studies and investigations. The mathematical aspects used in this research involved eigenvalues and the Eigen vectors of symmetrical always positive matrices. Reduction of the volume of data is the main objective of this analysis, where these data consist of a large number of variables with internal correlations, such that the maximum available information possible in the data is kept. This takes place through converting the data (variables) to new variables which are called principal component and are uncorrelated. They are prioritized in an order that a small number of them often bring the changes in the initial variables with them. In the analysis of principal component, although seemingly the main focus is on the variance of variables, considering the relationships between the variances and covariance's, this method also takes covariances or correlation coefficients into consideration implicitly.

Analytical network process (ANP)

Saati (1996) presented a method for multi-criteria decision-making. This method is called analytical network process (ANP) which has the aim of developing a model through which complex multi-criteria decision-making problems are analyzed into smaller components and through logical initialization they are converted to simpler components and finally combination of these values help in final decision-making. ANP method is the developed form of AHP method which is able to model the correlations and feedbacks between the elements affecting a decision-making and can take all internal effects of the effective components in decision-making into consideration and introduce them into the calculations. Therefore, with the help of this characteristic, this technique is superior then the previous relevant models. Indeed, it can be stated that AHP is a special form of ANP method. ANP method has two main parts, which combines these two parts in a process. The first part involves groups consisting of controlling criteria and subcriteria as well as the group which takes the options of the volunteer. The second part is a network of vectors and arcs which represent the dependencies and correlations and the feedbacks present in the decision-making system. Eventually, this method is based on conducting paired comparisons which is similar to the paired comparisons performed in AHP method. Analytical network process can be called the most complete multi-criteria decision-making method which has been presented so far. However, the single important problem in this model is performing paired comparisons. This problem which also exists in AHP method is considered problematic as a decision-maker is not always facing accurate states of commenting and in many decision-makings of the real world, the decision-

makers cannot make decisions about paired comparisons with certainty. The modeling process involves the following stages:

- The first step, basing the model and structure of the problem
- The second step, paired comparisons matrix and estimation of the relative weight
- The third step, development of the preliminary super matrix
- The fourth step, development of weighted super matrix
- The fifth step, calculation of the general weighted vector
- The sixth step, calculation of the final weight of the criteria

INTRODUCTION OF THE INFLUENTIAL CRITERIA AND SUBCRITERIA IN THE EVALUATION PROCESS

In this research, by presenting a framework, to identify and prioritize the extent of greenness of production industries and presentation of a solution for enhancing the greenness of supply chain. According to the background and interview with experts, the criteria effective in the evaluation process have been developed as the steps presented in the research according to Fig. 1. In this model, the aim is identification and prioritization of industrial contaminants in water (wastewater) which lies at level I. the production industries which include food industries, chemical industries, agriculture industries, and oil industries in two petrochemical and refineries of the oil in Tehran have been shown at Level II, which are in the form of nitrate (NO₃), nitride (N₃-), and ammonium (NH₃) present in food industries, phosphate (PO₄), sulfate (SO₄), and chloride (Cl-) present in chemical industries, phenol (C₆H₅OH), sulfide (H₂S), oil, mercury (Hg), and cadmium (Cd) present in oil industries, and nitrate (NO₃), ammonium (NH₃), phosphate (PO₄), and chloride (Cl-) present in agricultural industries, which are considered as subcriteria. BOD, COD, TDS, and TSS which are known as comparative evaluation indices of contaminants across all production industries are considered as the subcriteria at Level III. Finally, these contaminants are prioritized in industry in the order of contamination in the environment. The list of the contaminants includes the following (Cozzi et al, 2015):

Introduction of the criteria that detect the contaminants

- Biochemical oxygen demand (BOD): oxygen consumption rate inside water by organisms. If BOD is low, water is clean and lacks any organism or the organisms inside water are dead and have no need to consume oxygen. BOD is the amount of oxygen required for biological stability in water. The size of facilities of biological treatment especially the wastewater aeration rate in aeration basins can be calculated by BOD level. If water BOD is 1 ppm, then the water is almost pure. Water with a BOD up to 5 ppm is considered to be relatively pure, but when it exceeds 5 ppm, purity of water is questioned. However if its value goes beyond 20 ppm, the public health is jeopardized. BOD experiments provide a realistic estimation of the quality of oxygen that has been introduced into the water (Bouwknegt et al, 2015).
- Chemical oxygen demand: it is the amount of oxygen that is required so that the organic compounds present in the sample are chemically stabilized. The utilized oxidizer is usually potassium dichromate in the presence of sulfuric acid. Wastewater contamination caused by the external compounds that enter water as suspended or soluble form, cause its contamination and production of wastewater. Evidently, the higher the level of these compounds in wastewater, the greater its contamination load. Therefore, measurement of the amount of external compounds of wastewater is the major key in determining the extent of contamination of wastewater (Liu et al, 2011).
- Total dissolved solids or concentration of minerals: it is the amount of organic compounds or mixed inside a liquid, where these compounds can exist in water as

molecular or ionized form or very tiny grains at micron level as a suspended form. The primary resources (major applications) for TDS in receiving waters, the waters resulting from agriculture and residential areas, soil contamination washing and the contaminated water resources discharged from industrial units and wastewaters. The most important aspect of TDS, taking water quality into consideration, is its effect on the taste of water. Clarity and transparency of water with a TDS lower than 600 mg/l is generally considered a good state. Drinking water with a degree above 1200 mg/l is considered an unfavorable state by the majority of consumers. The difference between TDS and TSS lies in the fact that in TSS the particles cannot pass through a filter with a 2-micron scale and remain suspended in the solution for an unknown time (Mulberry et al, 2010).

Classification of water contaminants

The processes for selecting the selection criteria of the extent of contamination of industries are based on the two following areas:

- Investigation of the criteria used by previous researchers
- Study of the contamination indices and important contaminating industries according to managers and experts of environment

Based on the mentioned process, a set of the most important selection indices of industries and contaminants were considered as the main measurement criteria.

1. The criterion of contamination of food industries: Based on the extent of significance and development of these contaminants in groundwaters, the criterion of food industries consists of three subcriteria of "nitrate", "phosphorus", and "protein" (Zhang et al, 2013).
2. The criterion of contamination of chemical industries: The four following criteria are considered the most important subcriteria of the characteristics of this industry in laboratory trusted by the environment, which have been selected at this stage: lead, mercury, copper, alkalinity of suspended solids and heavy metals (Wu et al, 2012).
3. The criterion of contamination of oil industries: the following subcriteria are among the most important ones of this industry in measuring the extent of contamination: phenol, hydrogen sulfide, oil, ammonium, and TPH (Zailani et al, 2015).
4. The criterion of contamination of agricultural industries: furthermore, the following criteria have been considered as the subcriteria associated with agricultural industries: nitrate, chemical fertilizers, sediments, and TOG (Yongming et al, 2006).

Fig. 1. Represents the major contaminants by individual types.

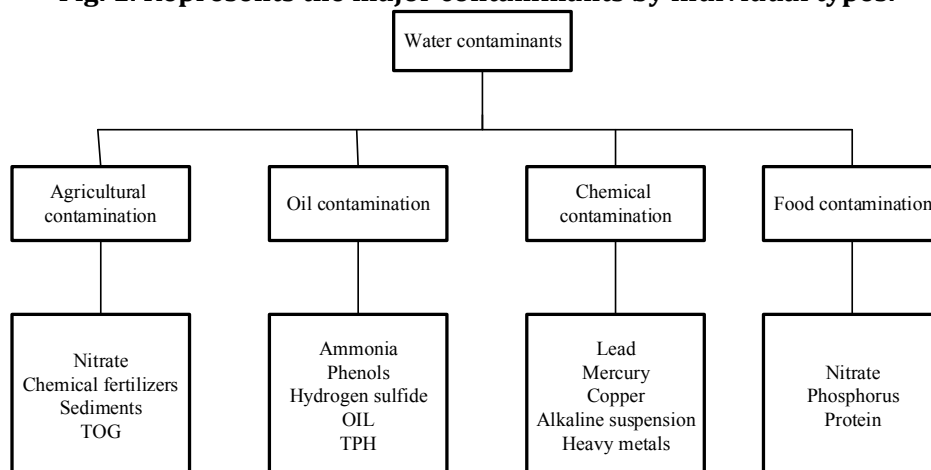


Fig. 1. Classification of the contaminants

RESULTS

Next comes explanation of the results of the open-ended questionnaire and analytical network process method.

Statistical analysis

According to the previous studies, 20 water contaminant indices were extracted and then distributed among 145 experts, so that based on their previous background, a score between 1 (the least significant) and 10 (the most significant) would be given. Accordingly, for ranking the contaminants, statistical methods and especially factor analysis and PCA were used. Then, we deal with explanation of the results of the open-ended questionnaire. Tables 1-3 present the preliminary factor analysis of the indices for estimating the contributing performance of each of the contaminants on the problem's objective.

Table 1. The ratio of the variance of each of the contaminants

Communalities		
	Initial	Extraction
Nitrate	1.000	.783
phosphor	1.000	.671
PH	1.000	.667
OIL	1.000	.667
TDS	1.000	.712
heavy metals	1.000	.579
TSS	1.000	.559
Ammonia	1.000	.599
Phenols	1.000	.532
Protein	1.000	.491
Chemical fertilizers	1.000	.627
COD	1.000	.591
Sediments	1.000	.712
Hydrogen sulfide	1.000	.684
Lead	1.000	.708
Mercury	1.000	.725
Copper	1.000	.726
DO	1.000	.572
BOD	1.000	.472

Extraction Method: Principal Component Analysis.

Table 1 provides the ratio of the variance of the scores taken by each contaminant by the experts. As can be observed in the table, the contaminants nitrate, sodium, and TDS have claimed the highest score by the experts of environment regarding water contamination.

Table 2 presents the frequency distribution of the sum of the variance of contaminants. In this table, the results were investigated based on PCA method. In the above table, Initial eigenvalues column represents the variance associated with the complete set of contaminants from the initial results. Furthermore, the column of extraction sums of squared loadings demonstrate the variance of the most important contaminants among all the contaminants.

Table 2. The sum of distributional variance of the contaminants

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.759	9.257	9.257	1.759	9.257	9.257
2	1.621	8.533	17.789	1.621	8.533	17.789
3	1.529	8.049	25.839	1.529	8.049	25.839
4	1.392	7.325	33.163	1.392	7.325	33.163
5	1.374	7.234	40.397	1.374	7.234	40.397
6	1.178	6.199	46.596	1.178	6.199	46.596
7	1.142	6.013	52.609	1.142	6.013	52.609
8	1.078	5.672	58.281	1.078	5.672	58.281
9	1.000	5.266	63.546	1.000	5.266	63.546
10	.970	5.103	68.649			
11	.898	4.728	73.377			
12	.857	4.509	77.886			
13	.811	4.267	82.153			
14	.739	3.890	86.043			
15	.667	3.511	89.554			
16	.610	3.209	92.763			
17	.523	2.750	95.513			
18	.469	2.471	97.984			
19	.383	2.016	100.000			

Extraction Method: Principal Component Analysis.

Table 3. The correlation matrix between each of the contaminants

Component Matrix(a)									
	Component								
	1	2	3	4	5	6	7	8	9
TSS	-.583	.098	.315	.224	.149	.011	.181	.057	.046
TDS	.572	-.169	.230	.350	.044	.000	-.056	-.416	-.046
Lead	.534	-.087	.248	-.086	-.303	-.040	.035	.270	-.423
Chemical fertilizers	.070	.566	-.202	.171	.043	-.031	.003	-.432	-.204
heavy metals	.213	-.503	.260	-.230	.278	-.149	.183	-.077	.149
Ammonia	.365	.488	.227	-.112	.088	.253	-.048	.300	-.009
Sediments	.126	.138	-.674	.185	.150	.217	.243	.029	.244
Mercury	-.215	.205	.472	.187	-.392	.307	.042	-.343	.103
Phenols	.104	.327	.275	.379	.275	.299	.041	.147	-.077
BOD	.362	.040	-.095	.375	.246	.001	-.109	.085	.331
Copper	-.215	-.314	.110	-.170	.525	.319	-.249	-.061	-.312
DO	.158	-.202	.291	.404	.432	-.156	-.156	.065	.137
COD	-.124	-.350	-.055	.358	-.383	-.206	-.257	-.123	.227
Nitrate	.131	.112	.283	.044	-.030	-.402	.712	-.039	-.012
phosphor	.198	.348	.174	-.172	-.178	-.300	-.561	.005	.120
OIL	-.179	-.235	.170	.344	-.382	.321	.022	.422	.070
Protein	.033	.053	-.250	.312	-.019	-.356	-.021	.414	-.170
Hydrogen sulfide	.414	-.098	.016	-.360	-.156	.363	.124	.022	.447
PH	-.269	.362	.305	-.257	.217	-.276	-.078	.153	.390

Extraction Method: Principal Component Analysis.
a. 9 components extracted.

Table 3 indicates the correlation matrix between all of the contaminants with nine selected contaminants which had the greatest contamination variance as commented by experts according to Table 2. Based on the results of this table, all of these contaminants have a low correlation with each other.

Table 4. The final ranking of the contaminants according to expert comments

Final Ranking	Score	contaminants
2	0.955	Nitrate
10	0.734	phosphor
4	0.808	PH
13	0.719	OIL
15	0.711	TDS
12	0.726	heavy metals
11	0.729	TSS
12	0.726	Ammonia
3	0.83	Phenols
14	0.717	Protein
16	0.707	Chemical fertilizers
7	0.764	COD
8	0.754	Sediments
14	0.717	Hydrogen sulfide
1	0.97	Lead
17	0.703	TOG
6	0.785	Mercury
5	0.788	Copper
9	0.743	DO
17	0.703	BOD

As can be observed in Table 4, Lead contaminants is considered the most important water contaminant by the experts. It is followed by nitrate with the score of 0.955, as the second rank. Furthermore, in the above table it can be deduced that several contaminants had the same score according to the experts, which include hydrogen sulfide and heavy metals, both of which had a score equal to 0.717.

Analytical Network Process

In order to achieve the objective of the research, paired comparisons questionnaires were designed and distributed among the experts. Considering the verbal judgment approach in this research, the statements and numbers written in Table 5 were used.

Table 5. The defined numbers

relative comparison of the indices (verbal judgment)	Priority number
Absolute significance	9
Very strong significance	7
Strong significance	5
Weak significance	3
Equal significance	1
Intermediate values	2,4,6,8

In this section, based on the hierarchical network, the prepared paired comparisons tables and the modified method of Asgharpour et al (1388), the weight of the components was obtained and they were then prioritized. The results were calculated by Super Decision software.

In this research, ANP technique was used for determining the priority of objectives. For this purpose, using ANP questionnaire, 15 (Wibisono, D., & Khan) managers and experts of the field of environment related to oil and petrochemical contaminants were requested to give their comments. Thereafter, the data written in the matrices were analyzed by Excel and Super

Decision software applications. Based on them, the inconsistency rate was obtained to be 0.04. As this rate is lower than 0.1, then the obtained weights are reliable. Next, the results obtained from the analytical network process are explained in detail.

Table 6. Ranking of the major criteria

The main criterion	weight	rank
agricultural contaminants	0.321	1
chemical industries	0.286	2
oil contaminants	0.152	4
food industries	0.241	3

Table 6 represents the ranking of the major criteria of water contaminants. As can be observed in the table, agricultural contaminants (weight=0.321) and oil contaminants (weight=0.152) stand in the first and fourth rank, respectively. Next, in Tables 7-10, the ranking of the subcriteria of the contaminants of each of the four major criteria is presented.

Table 7. The ranking of this sub-criteria of food contaminants

The main criterion	weight	rank
Nitrate	0.455	1
Phosphorus	0.431	2
Protein	0.114	3

The results of Table 7 indicate that the nitrate element claimed the first rank in the subcriteria of food contaminants. Furthermore, this result confirms the first section of the research in the open-ended questionnaire, as the majority of experts had chosen this element as the second important contaminant.

Table 8. Ranking of the sub-criteria of agricultural contaminants

The main criterion	weight	rank
nitrate	0.287	1
chemical fertilizers	0.255	2
sediments	0.215	3
TOG	0.243	4

The results of Table 8 indicate that the nitrate element lies in the first rank among the subcriteria of agricultural contaminants. As was stated in the results of this subcriteria of food contaminants, this result confirms the first section of the research in the open-ended questionnaire, as the majority of experts had chosen this element as the second contaminant.

Table 9. Ranking of the sub-criteria of chemical contaminants

The main criterion	weight	rank
alkalinity of suspended solids	0.155	4
Heavy metal	0.096	5
lead	0.382	1
mercury	0.166	3
copper	0.201	2

Table 9 represents the results of ranking the subcriteria of chemical contaminants. As can be observed, lead with the weight of 0.382 is standing in the first rank of these subcriteria. As had been shown in Table 4, the lead element was considered the most important contaminant by the experts in the field of oil and petrochemical industries.

Table 10. The ranking of the sub-criteria of oil contaminants

The main criterion	weight	rank
oil	0.160	4
TPH	0.198	2
ammonium	0.301	1
hydrogen sulfide	0.188	3
phenol	0.143	5

Table 10 represents the results of ranking the subcriteria of oil contaminants. As can be observed, ammonium with their weight of 0.301 claims the first rank in these subcriteria. It is followed by TPH and hydrogen sulfide with respective weights of 0.198 and 0.188.

CONCLUSION

Many of the rivers in the country such as Karoun, Zayandehroud, and Sefidrood are challenging with both quantitative problems and devastation of the quality of water resources. Gas stations and underwater reservoirs of storage of oil products and derivatives, due to not performing the necessary monitoring and the decay of their walls, are regularly contaminating the environment and especially groundwater resources. In the majority of Iranian villages, household wastewaters are present at the level of avenues and open warehouses or are discharged through absorption wells. This type of discharge of wastewaters has caused contamination of surface and groundwater resources. Furthermore, the leachates caused by livestock waste which contains large amounts of nitrogen and micro creatures, contaminates water resources. Typically, these contaminating sources are also pathogenic. By limiting the origin of water contaminants, the quality of water resources can be improved significantly. Use of detergents in a controlled way and at the required level, limitation of usage of chemical fertilizers, pesticides, and insecticides, and not discharging oil contaminants onto impermeable grounds and running water resources can significantly prevent entrance of contaminants to water systems. Further, the place of the living and grazing of local live stocks should be as far from water resources as possible, so that entrance of their wastes into surface waters is prevented. The wastewater of industries, small stores, restaurants, and canteens contain large amounts of organic and inorganic contaminants which should not be discharged into rivers and seas directly and without treatment.

As was indicated in Table 4, lead contaminant is the most important water contaminant according to experts. This element is followed by nitrate with the score of 0.955. Furthermore, in this table it can be deduced that several contaminants had the same score according to the experts, which include hydrogen sulfide and heavy metals, both of which had a score of 0.717.

In future research, other probabilistic modeling approaches can be used or with a combinational approach, fuzzy systems and artificial intelligence can also be employed, and the results can then be compared with each other. Furthermore, it is possible to benefit from robust approach to allocate and correspond with uncertainty.

- Use of Z-numbers calculations in the investigational variables
- further, as the waste water from chemical processes of companies is considerable and environmental contamination is also an issue for the organization of environment, if these contaminations exceed a certain environmental determined level, it will lead to considerable fines, thus for future research, the factor of air pollution can also be added to the problems and the results can be investigated.

- Placing septic tank 1 for wastewater and hen transference of the contents to remote and safe areas or retreat ability of these wastewaters. These processes can be compared with the current environmental implications and the results can also be investigated.
- Integration of the strategic decisions with tactical/operational decisions. For example, in the issue of management of industrial wastewaters and emission of greenhouse gases, the presented suggested models can result in saving on the up to a certain level. A greater level of saving can be accompanied by strategic and large-scale decisions such as construction of treatment systems or to ideological development of construction processes. On the other hand, other strategic decisions such as construction of new production companies and suppliers can also be very interesting.
- Development of other heuristic and metaheuristic methods for multi-objective optimization problems under uncertainty conditions with large-scale
- Problem modeling by considering other objectives such as minimizing the change across the human workforce, minimizing emission greenhouse gases and industrial wastes
- Modeling the problem as a hierarchy and comparing its strong and weak points with an integrated approach
- modeling in a decentralized form and comparing its weak and strong points, in relation with a centralized approach (in the proposed models, all tactical and operational decisions have been modeled by the main company and by considering the profit and loss of the entire chain in a centralized form, the decentralized approach can be taken in a way that in the supply chain, each company is program individually such that it is able to both optimize its program and in a multiparty game of the entire chain, moves towards the total optimum).

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