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## Editorial

Information Management and Business Review (IMBR) provides a unique platform to scholars around the world to share their knowledge and publish research work in the fields of information management, business, management and related disciplines. The work submitted for publication consideration in IMBR should address empirical and theoretical developments in the subjects related to scope of the journal in particular and allied theories and practices in general. Scope of IMBR includes: subjects of finance, accounting, auditing, cost & management accounting, financial psychology, financial literacy, marketing, information management, human resource management, knowledge management, innovation, change management, enterprise management, e-commerce and information system. Author(s) should declare that work submitted to the journal is original, not under consideration for publication by another journal, and that all listed authors approve its submission to IMBR. It is IMBR policy to welcome submissions for consideration, which are original, and not under consideration for publication by another journal at the same time. Author (s) can submit: Research Paper, Conceptual Paper, Case Studies and Book Review. The current issue of IMBR comprises of papers of scholars from Indonesia, Oman, Malaysia, and Bahrain. Effect of competence & compensation on employee's performance, profitability ratio analysis & its effect's to firm value, effect of emotional intelligence dimensions on enhancing employees' eustress at work, factors hindering the adoption of business-to-consumer (B2C) in developing countries and impact of mergers and acquisitions on financial performance of banks are some of the major practices and concepts examined in these studies. Journal received research submission related to all aspects of major themes and tracks. All the submitted papers were first assessed by the editorial team for relevance and originality of the work and blindly peer reviewed by the external reviewers depending on the subject matter of the paper. After the rigorous peer-review process, the submitted papers were selected based on originality, significance, and clarity of the purpose. Current issue will therefore be a unique offer, where scholars will be able to appreciate the latest results in their field of expertise, and to acquire additional knowledge in other relevant fields.

Prof. Dileep Kumar, M., Ph. D.  
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## **PAPERS**

**The Effect of Competence and Compensation on Employee's Performance in Transportation  
Department Provincial of South Sulawesi**

Indira Basalamah  
STIE Wira Bhakti Makassar, Indonesia  
Graduate Student Moeslim Indonesian University, Indonesia  
Indira\_Basalamah@Yahoo.co.id

**Abstract:** Transportation Department Provincial of South Sulawesi which has 365 employees is a government institution in a unit within the government of Makassar City in the field of transportation service. The purpose of this study is to analyze the influence of competence and compensation on employee performance. This study uses a causal approach and to analyze the influence of independent variables (knowledge, skill, attitudes, and experience) on the dependent variable (employees performance) using data quality test methods, classical assumption test, descriptive statistical test, multiple regression test and hypothesis test. The structured research questionnaires to 78 respondents, the result of research suggests that all independent variables simultaneously have a positive and significant effect on employee performance and significant effect on employee performance and partially skilled variable (X2) is the most dominant variable has a positive and significant influence on the transportation department of South Sulawesi Province.

**Keywords:** *Knowledge, skill, attitude, traits, financial compensation, non financial compensation, and Employee performance*

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## 1. Introduction

As a government agency that prioritizes public services, always try to improve the performance of employees as a whole. The role of human resources is the agency's main asset to create efficiency, effectiveness, and productivity. Effective human resources requires the leadership to find the best way to utilize the people in the organization environment so that the desired goals can be achieved. A well-maintained and growing performance will have a positive impact on the organization to improve and increase the public trust of users of public facilities and institutional benefits sustainably. However, performance does not automatically build but must be based on a strong foundation in order to survive the competition and dynamics of globalization. The main pillars to build employee performance include the competence of employees and fair and reasonable compensation. Competence-based human resources can increase capacity and build foundation because if the people who work in the organization have the right competence in accordance with the demands of his work, then the skills and mental and productive character (Istijanto, 2006). Each employee has the knowledge, abilities / skills, attitudes, and dispositions that vary according to the background of his life. With strong ownership of value, they will always be ready for change in accordance with the demands of the organization without losing its identity. Determination of the required competencies will certainly be used as a basis for performance evaluation of employees. Improving employee performance on an individual basis will compensate for overall HR performance (Muneer et al., 2016).

Compensation is one of the execution of HR functions that relate to all kinds of individual award giving as an exchange in performing organizational tasks. The compensation program can be divided into two groups based on the form of compensation and the manner in which it is granted. Compensation is divided into financial compensation (financial compensation) and nonfinancial compensation (nonfinancial compensation). According to the method of giving the compensation can be divided into direct compensation (direct compensation) and indirect compensation (indirect compensation). The use and application of appropriate and effective compensation will have a significant effect on the organization. When compensation is properly and appropriately targeted, employees will be more satisfied and motivated to achieve organizational goals (Abdullah, 2014). Department of Transportation of South Sulawesi Province as one of the government work unit which concentrate on transportation service field has civil servant status is required to have high performance in providing service for society. Achievement of high performance as a form of professionalism indicates the role of indicators such as employee competence and compensation has been done well. However, in this institution there is still a considerable gap in justice and equity. Traditional

compensation systems adopted by class, rank, and minority. Compensation for employees has not been able to balance organizational goals and personal goals (Tufail et al., 2016).

Employees are always required to work and contribute more in the job but performance appraisal performance standards have not been applied. Only employees with functional positions have the opportunity to compensate financially and nonfinancial. Suwanto and Priansa (2014) stated that in reality it is difficult to establish a compensation that is really adequate, this is because the absence of a method most appropriate. In determining the compensation must be adjusted to the conditions and demands relating to internal and external consistency. The phenomenon made the Department of Transportation of South Sulawesi province to make improvements to improve performance through the determination of compensation standards based on competence. When an organization decides the application of a competency-based system, it takes significant time investment and management commitment. Because competency plans focus on the growth and development of employee competencies, employees who continue to develop their competencies also benefit from receiving a fair and marvelous raise.

## 2. Literature Review

**Competence** in the inner part of every human being and forever exists in the personality of a person who can predict behavior and performance extensively on all work situations and tasks. Spencer & Spencer (1993) defines competence as a basic characteristic of a person with regard to the effectiveness of individual performance in his work. The basic characteristics of a person who identifies the way of thinking, acting, and acting and drawing conclusions that can be done and maintained by a person at any given time. The steps to determine the competence of a particular job position need to determine the specific functions of a position (function of job), learn how activities in the process of doing the task (activity or process), and determine what competencies are needed in the position. The purpose of the need in determining the level of a person's competence is to know the level of performance of the person in doing a job. Moehariono (2014) suggests that everyone has some basic competencies: (1). Traits, which makes a person have attitude or behavior how people respond to something in a certain way, such as self-confidence, self-control, hardiness or hardiness (2). Motive, which is something that one wants or is consistently thought of and desired that results in an action. (3). Self-concept is the attitude and values that a person has or what attracts a person to do something. (4). Knowledge, is information possessed by a person in a particular field, (5) Skill, that is the ability to perform tasks physically and mentally. In individual competencies can be grouped into (1) Competence threshold or minimum competence must possess a person that is the ability pengetahuan or basic skills, (2) Competence differentiating the competencies that distinguish a high-performing person at a low with other employees.

Competence of knowledge and skills is easier to develop through education and training programs for employees who are considered less competent. While the competence of self-concept, character and motives are in personality iceberg, more hidden so quite difficult to be developed, and to find out through psychologist with interview test. In detail, there are five dimensions of competency that must be owned by all employees individually, (1) Task skills, is skills to perform routine tasks in accordance with workplace standards, (2) Task management skills are skills to manage a series of tasks (3) Contingency management skill are learning to take quick and precise action when a problem arises in a job. (4) Job role environment skills, is skills to cooperate and maintain work environment comfort, (5) Transfer of skill is the skills to adapt to the new work environment.

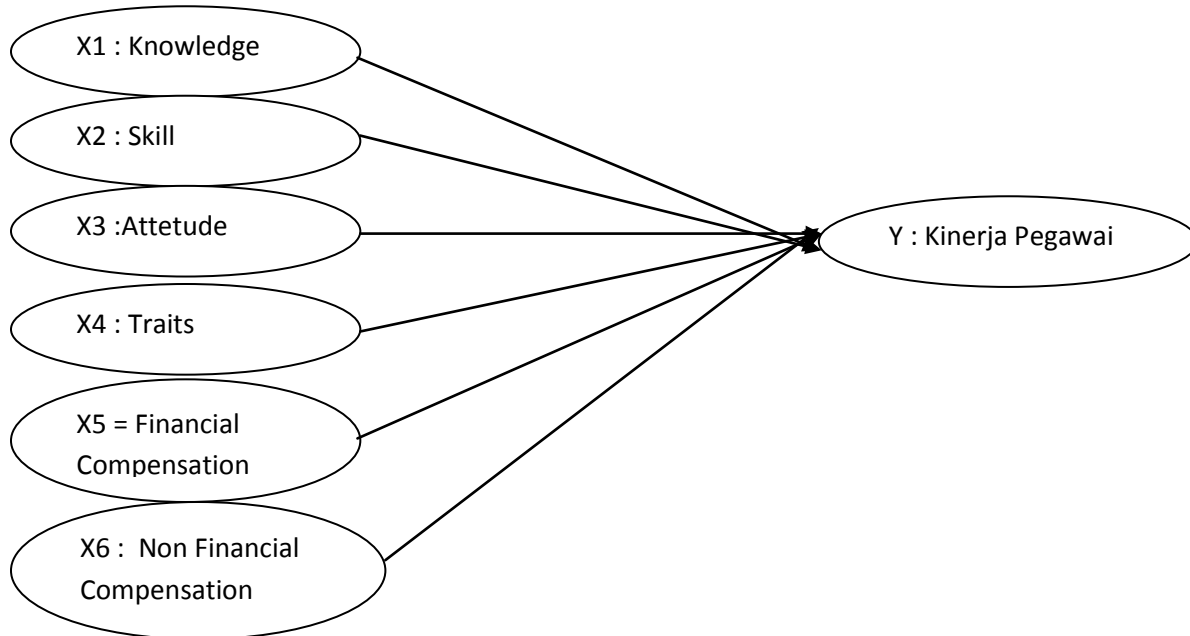
**Compensation** is something an employee receives as a substitute for the contribution of their services to the company (Zainal et al., 2014). Compensation is an important factor affecting how and why people work in an organization and not in other organizations. Employee compensation also refers to all forms of payment or rewards for employees and comes from their work (Dessler, 2007). The compensation program can be divided into two major groups namely based on the form of compensation and the manner of payment. Based on the form, compensation is divided into financial compensation and nonfinancial compensation. Meanwhile, according to how the payment is divided into direct compensation and indirect compensation. Direct compensation consists of basic salary, performance payments, incentives (commissions, bonuses, profit share, stock options), retirement savings, and cumulative shares. Indirect compensation includes

protection (insurance, severance pay, further studies, children's schools, pilgrimage, retirement), off-hours compensation (overtime, holiday, sick leave, maternity leave), and facilities (moving costs, vehicle). Non-financial Compensation includes reward for career (position, promotion opportunity, recognition of work, new findings, special achievements) and work environment (praise, friendly, comfortable duty, fun, and conducive). If managed well, compensation will help the agency to achieve its goals and obtain, maintain, and keep employees well. Conversely, without sufficient compensation, existing employees are very likely to leave the agency and to reassign it is not easy. The compensation system has an impact on job satisfaction and also affects the retention rate of employees (Nawab & Bhatti, 2011). Compensation in the form of financial and non-financial rewards is a tool for achieving job satisfaction and is able to motivate and retain employees as human capital to achieve competitive organization (Osibanjo et al., 2014).

Performance is a description of the level of achievement of the implementation of an activity or policy program in realizing organizational goals, objectives, vision and mission as outlined through strategic planning of an organization (Moehariono, 2014). Mangkunegara (2004) defines performance as a result of work in quality and quantity achieved by an employee in performing its duties according to the responsibilities given to it. Suwanto and Priansa (2014) define performance as a result achieved by a person according to the applicable size, within a certain period of time concerning the work and its behavior and actions. The determination of performance indicators should ideally meet the following requirements: consistency, comparability, clarity, controllability, contingency, comprehensiveness, boundedness, relevance, and feasibility. Companies will always improve their productivity through consistency of delivering the best performance and maintaining the competitive advantage of the organization. The factor in providing competitive advantage for agencies is human resources, as well as related to how to manage these resources (Muneer et al., 2014).

**Conceptual Framework:** For ease of understanding, it can be frame of the study as followa:

**Figure 1: Conceptual Framework Research**



### 3. Methodology

This type of research used in this research is Quantitative Descriptive Analysis. This research was conducted at Transportation Department Provincial of South Sulawesi. The sample used was 78 respondent from the total population of 365 employees. This analysis is used Multiple Liner regression is formulated as follows:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + B5X_5 + b_6X_6 + e$$



Y = Employees' performance  
 B0 = Constant  
 X1 = Knowledge  
 X2 = Skill  
 X3 = Attitude  
 X4 = Traits  
 X5 = Financial Compensation  
 X6 = Non-financial Compensation  
 B1, b2, b3, b4, b5, b6 = regression Coefficients  
 E = variable error

The variables used in this study include the independent variable, the variable suspected as the cause of the dependent variable. In this case the independent variable is the competence and compensation, consisting of Knowledge (X1), Skill (X2), Attitudes (X3), Traits (X4), Financial Compensation (X5), Non-financial Compensation (X6). The dependent variable in this study is Employee Performance (Y).

#### 4. Results and Discussion

The simultaneous test (F test) is conducted to find out whether all independent variables X simultaneously have a significant influence on the dependent variable of employee performance (Y).

**Table 1: Determination Analysis Model Summary**

Model	R	R Square		Std. Error of Estimate	Change Statistics			Sig. Change	F
		Adjusted R Square	Change		F Change	df1	df2		
1	.860 <sup>a</sup>	.730	.717	.26193	.739	33.484	6	71	.000

a. Predictors: (Constant), Knowledge, Skill, Attitude, Traits, financial Compensation, Non-Financial Compensation

Source : Data, 2016

The data shows that the value of correlation coefficient (R) of 0.860 can be interpreted that there is a positive relationship and direction between variable X with variable Y. Value R<sup>2</sup> = 0.730. This means, the influence of variable X (knowledge, skill, attitude, traits, financial compensation and non financial compensation) simultaneously to variable Y (employee performance) is 73% and other variable influence 27%. This effect is very good because it is greater than 60% and significant (Pvalue) = 0,000.

**Table 2: Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	T	
(Constant)	-2.012	.483		-4.164	.000
Knowledge	.259	.088	.244	2.936	.004
Skill	.370	.096	.313	3.838	.000
Attitude	.184	.082	.167	2.248	.028
Traits	.199	.083	.181	2.388	.020
Financial Compensation	.175	.083	.152	2.117	.038
Kompensasi NonFinansial	.228	.086	.204	2.648	.010

a. Dependent Variable: employee performances, Source : data 2016

Partially indicate that skill variable have positive and significant influence to employee performance at Transportation Department of South Sulawesi Province. This is shown in the acquisition of t-count value of 3.838 with a significant level of 0,000 which means 38.38% of employees have the skills or skills in the form of the ability to perform tasks physically and mentally.

The regression equation is formulated as follows :

$$Y = -2,012 + 0,259X_1 + 0,370X_2 + 0,184X_3 + 0,199X_4 + 0,175X_5 + 0,228X_6$$

The multiple regression equation can be explained as follows: The coefficient  $b_0 = -2,012$  means that if the independent variable (X) does not change (constant), then the performance of employee (Y) at Transportation Department of South Sulawesi Province will decrease. The coefficient  $b_1 = 0,259$  means If knowledge (X1) is improved, it is expected to improve employee performance (Y) at 25.9%. The coefficient  $b_2 = 0,370$  means that each skill variable (X2) is improved, it is expected to improve employee performance (Y) by 37%. The coefficient  $b_3 = 0,184$  shows any increase of attitude variable (X3), hence expected to improve employee performance (Y) equal to 18,4%. Coefficient  $b_4 = 0,199$  means every character of traits (X4) is improved, hence expected performance of employee (Y) increase equal to 19,9%. Coefficient  $b_5 = 0,259$  means employee performance will increase by 25,9% if institution pay attention to increase of Employee's Financial Compensation. The coefficient  $b_6 = 0,228$  means that if the agency also paid attention to the award of non-financial compensation of employees, it is expected that its performance will increase by 22.8%.

The results of multiple regression analysis from the results of this study indicate that all independent variables studied consist of knowledge variables (X1), skill (X2), attitude (X3), trait (X4), financial compensation (X5) and non-financial compensation (X6) simultaneously have a positive and significant effect on employee performance at Transportation Department of South Sulawesi Province. Of the six variables, the skill variable (X2) is the most dominant variable has a positive and significant effect on the performance of employees at the Transportation Department of South Sulawesi Province. The variables of knowledge have positive and significant effect on the performance of the employees at the Transportation Department of Sulawesi Province. Technological innovation, changes in the structure and processes within the organization so that employees must work fast. Consequently someone will learn continuously and competence development will be important to improve (Sonntag & Frese, 2001). The process of analytical thinking, conceptual thinking, knowledge of work and level of knowledge is an integrated and synergistic unit capable of forming effective performance. The skill variable has a positive and significant effect on the performance of the employees at the Transportation Department of South Sulawesi Province. Moehariono (2014) suggests that skills as one of the characteristics of competence predict or lead to an effective performance. The results of this study are also in accordance with the statement of Zainal, et al (2014) that the ability and skills are the main factors affecting the behavior and performance of individuals. Skill variables through information disclosure, proactivity, attention to task clarity, and ability to influence are synergistic entities capable of effective performance.

The result of regression analysis shows that attitude / behavioral variables have positive and significant effect on employee performance at Transportation Department of South Sulawesi Province. How to develop others, directing skills, teamwork and leading the group is an indicator that can shape employee performance. Sonntag and Frese (2001) say the success of the organization is demonstrated by the achievement of teamwork performance. Similarly, the variable traits of a person who has a positive and significant effect on the performance of employees at the Department of Transportation of South Sulawesi Province. Moehariono (2014) argues that the character possessed by each individual has a behavioral attitude to respond to things in a certain way. This is reflected in self-confidence, self-control, a sense of fortitude and patience in the face of increasingly fast and precise demands of work. Financial Compensation and Non-financial Compensation Variables also have a positive and significant effect on employee performance. Giving merit pay is a payment system that correlates rewards with work performance of an employee (performance) .Implikasinya that someone who has a good performance, then he will get higher compensation and vice versa. That is, the higher the performance of employees will be higher the increase in compensation.

## 5. Conclusion and Recommendations

Result of research and discussion that has been described, it can be concluded as follows:

- There is a strong relationship between competence and compensation on employee performance at the Transportation Department of South Sulawesi Province.
- Simultaneously, all competence and compensation variables have a positive and significant effect on employee performance at Transportation Department of South Sulawesi Province.
- Partially, the skill variables or expertise possessed by the most dominant individuals affect the performance of employees. This is the basis of the importance of institutions to develop training programs continuously in order to increase employee performance.
- If the agency does not attempt to improve the competency and compensation variables of its employees, then the performance of its employees will decrease.
- For the next researcher there are still some variables that have relationship with improvement of employee performance, for example about engagement which theoretically have the potential to improve employee performance.

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## Profitability Ratio Analysis and its Effect's to Firm Value in the Food and Beverage Industry in Indonesian Stock Exchange

Sitti Murniati

STIE Wira Bhakti Makassar, Indonesia

Graduate Student of Moeslim Indonesian University, Indonesia

sittimurniati@ymail.com

**Abstract:** This study aims to analysis the profitability ratio consisting of net profit margin, basic earning power and contribution margin and its effect on firm value in Food and Beverage industry. The data in this study, obtained from the capital market information center with the object of research in Food and Beverage industry listed on the Indonesian Stock Exchange. This study uses secondary data sourced from the financial statements in Food and Beverage industry, published by the Indonesian Stock Exchange in 2012 until 2015. The data analysis method used is multiple regression analysis. After analysis of all data, the result of research is as follows: 1) net profit margin has a positive and significant effect to price book value which means that management experience success in operational matter and will result in increasing investor trust to invest in Food and Beverage industry, 2 ) basic earning power has a positive and insignificant effect to price book value which means that the working capital in the issuer is only the operating capital or operating assets, as well as the profit that is accounted for only from the operating income of the company is net operating income, and 3) contribution margin has a negative and significant effect to price book value which means that the issuer has not been able to generate profits from the sales of its product caused by the selling price of down so that the contribution margin amount cannot be used to cover all fixed costs so that there is loss in the period.

**Keywords:** *Net Profit Margin, Basic Earning Power, Contribution Margin and Price Book Value*

### 1. Introduction

The firm value analysis will be provided information's useful to investors in assessing the future prospects of the company in generating profits. For companies that have good firm value will give a positive signal to rising stock prices. The firm values that have issued their shares to the public in the capital market will be reflected in the company stock price in the capital market. If the company has good prospects in the future, then the stock price will increase. Conversely, if the company is rated by shareholders as less prospective then the stock price will decrease, (Mardiyati et al., 2012). Profitability is one of the factors that affect the firm value. Profitability is the company's ability to generate profits at certain levels of sales, assets and capital (Hanafi, 2013). One important indicator for investors in assessing the prospects of the company in the future is to see how far the growth of company profitability. The profitability of a company is one way to judge precisely how far the rate of return to be derived from its investment activity. Weston and Copeland (2008), profitability can reflect the benefits of financial investment that mean profitability affects the firm value because increasingly large internal source. The better growth in company profitability means the prospect of the company in the future is rated better the firm value will be rated better of investors. If the company's ability to generate profit increases, then the stock price will also increase. A company that have high profitability and managed to record an increasing profit will show that the company is performing well so that it will create a positive response to shareholders and make the company stock price increases. High profitability also shows good company prospects that will create positive sentiment for shareholders and firm value will be increase (Sujoko and Soebiantoro, 2007). This is because profitability is the end result of a number of policies and management decisions of the company.

### 2. Literature Review

**Profitability.** Brigham and Houston (2011), profitability is the end result of a series of policies and management decisions, where these policies and decisions concern the source and use of funds in running the company operations are summarized in the balance sheet and elements of the balance sheet. The better profitability will make investors become more confident to invest in the company. Good profitability will provide benefits to the company and shareholders. For the company, will get an injection of funds from investors and increase the market of firm value. Profitability is the ability of the company in obtaining profit

in a certain period (Susanti, 2010). The high or low profit earned by the company is also an indicator of company performance management. The higher the profit earned, the shareholders have the perception that the company has made efficiency in using assets owned, so that it can generate profit (Mardiyati et al., 2012). In this study profitability is measured by using net profit margin (NPM), basic earning power (BEP) and contribution margin (CM). Hanafi (2013), state that net profit margin (NPM) is a ratio that measures the rupiah profit earned by each one dollar sales. The greater NPM, then company performance will be more productive, so it will increase investor confidence to invest in company. Hanafi (2013), state that basic earning power (BEP) is a ratio that measures company ability to earn profit that is measured from the amount of profit before interest and tax deductions compared to total assets. The greater this ratio the better of company condition to earn profit. Hanafi, (2013), state that contribution margin (CM) measure the company ability to earn profit that will cover fixed cost or other operating cost. With knowledge of this ratio management can control expenditure for fixed cost or operating cost so that company can generate profit.

**Firm Value:** Alfredo (2011) explains that firm value is an important concept for investors, because it is an indicator for the market in assessing as whole the company. Kusumadilaga (2010) states that firm value is the price would be paid by prospective buyer if the company is sold. Tandelilin (2011) in stock valuation there are three types firm value are book value, market value and intrinsic value. Martalina (2011), some value concept that explains firm value are nominal value, market value, intrinsic value, book value and liquidity value. Nominal value is the value state formally in the budgeting of association of the company, mentioned explicitly in the company's balance sheet and also written clearly in the collective share letter. In firm value research is measured by using price book value (PBV) ratio. This ratio attributes the total market capitalization of the company to the shareholders' funds. This ratio compares the value of the stock market with the investment of shareholders in the company. Brigham and Houston (2011) the ratio of a stock's market price to its book value gives an indication of the investor's view of the firm. Husnan (2009) said price book value (PBV) can be used to measure the value of the company, the greater price book value (PBV) ratio, the higher the company is judged by the investors.

### 3. Methodology

**Research Design:** The design of this study is to determine whether the profitability ratio are measured by net profit margin (NPM), basic earning power (BEP) and contribution margin (CM) as independent variables affect the firm value measured by price book value (PBV) ratio as dependent variable.

**Population and Sample:** The population of this research is Food and Beverage industry which listed in the Indonesian Stock Exchange for 4 years that is year 2012 until year 2015 which amounts to 14 companies. Based on sampling technique using certain criterion, the research sample is 11 companies with 44 observations.

**Types and Sources of Data:** The type of data in this study is quantitative data in the form of numerical financial statements used as a basis to describe all indicators of variables analyzed. The data used is secondary data and sourced from the Indonesian Capital Market Directory (ICMD) or through the website [www.idx.co.id](http://www.idx.co.id) in the form of financial statements Food and Beverage industry listed in the Indonesian Stock Exchange.

**Collection Technique of Data:** The technique used is the documentation techniques. The go-public industry financial statements are selected as an analytical unit with the reason to obtain data and can access data in complete.

**Data Analysis:** The method of analysis used is multiple regression analysis. The use of this method with the consideration the pattern of relationships between variables in this study are correlative and causality, with the formula by Sugiyono (2013) is:  $Y = a + b_1X_1 + b_2X_2 + b_3X_3$

Explanation:

- Y = Price Book Value (PBV)
- X<sub>1</sub> = Net Profit Margin (NPM)
- X<sub>2</sub> = Basic Earning Power (BEP)

$X_3$  = Contribution Margin (CM)  
 $a$  = Constanta  
 $b_1, b_2, b_3$  = Coefficients Regression

#### 4. Results

Profitability measured by net profit margin (NPM) in the Food and Beverage industry listed in Indonesian Stock Exchange has fluctuated. The average of the highest NPM for 11 companies is seen in 2013 is 11.59%. The average of the lowest NPM for 11 companies is seen in 2014 is 10.24%. Profitability measured by basic earning power BEP in the Food and Beverage industry listed in Indonesian Stock Exchange has fluctuated. The average of the highest BEP for the 11 companies seen in 2013 is 20.28%. The average of the lowest BEP for 11 companies seen in 2015 is 14.06%. Profitability measured by contribution margin (CM) in the Food and Beverage industry listed in Indonesian Stock Exchange has fluctuated. The average of the highest CM for 11 companies is seen in 2012 is 28.83%. The average of the lowest CM for 11 companies is seen in 2012 is 26.80%. The firm value as measured by price book value (PBV) in the Food and Beverage industry listed Indonesian Stock Exchange has fluctuated. The average of the highest PBV for 11 companies is seen in 2014 is 8.29%. The average of the lowest PBV for 11 companies is seen in 2015 is 5.02%.

**Test of Multiple Linear Regressions:** Multiple linear regression test is the influence of independent variable to dependent variable. The magnitude of the influence of independent variables on the dependent variable can be calculated through multiple regression equations is:

$$Y = 1,948 + 1,074X_1 + 0,180X_2 - 0,349X_3$$

The regression equation can be interpreted as follows:

- The coefficient of 1,948 means that if the profitability ratio measured by net profit margin (NPM), basic earning power (BEP) and contribution margin (CM) is constant, then firm value as measured by price book value (PBV) will not change.
- The coefficient  $b_1$  of 1,074 means any increase in profitability ratio measured by net profit margin (NPM), then firm value as measured b-+y price book value (PBV) increased by 1,074. NPM variable is the dominant variable affecting PBV because it has value of Standardized Coefficients Beta bigger that is 0,885.
- The coefficient  $b_2$  of 0,180 means any increase in profitability ratio measured by basic earning power (BEP), then firm value as measured by price book value (PBV) increased by 0,180.
- The coefficient  $b_3$  of -0.349 means any increase in profitability ratio measured by contribution margin (CM), then firm value as measured by price book value (PBV) decreased by 0,349.

**Simultaneous Testing (Test F):** The test is conducted to test whether there is a significant difference between profitability ratio measured by net profit margin (NPM), basic earning power (BEP) and contribution margin (CM) to firm value as measured by price book value (PBV).

**Table 1: Simultaneous Testing (Test F)**

ANOVA <sup>b</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2902.082	3	967.361	22.375	.000 <sup>a</sup>
	Residual	1729.372	40	43.234		
	Total	4631.454	43			

a. Predictors: (Constant), Contribution Margin , Basic Earning Power , Net Profit Margin

b. Dependent Variable: Price Book Value

Source: Output SPSS, 2017



Based on the table above, it shows the significant value F is 0,000. Based on testing criteria that if the probability value is <0.05, then  $H_a$  is accepted. It can be concluded that the variable of profitability ratio measured by net profit margin (NPM), basic earning power (BEP) and contribution margin (CM) simultaneously significant affect the firm value as measured by price book value (PBV). It is shown on a significant F value is 22,375 with significant = 0,000 < 0,05. So if net profit margin (NPM), basic earning power (BEP) and contribution margin (CM) increase, the price book value (PBV) will also increase.

**The coefficient of determination (R<sup>2</sup>):** Coefficient of determination analysis performed to see how big a percentage of variables influence of the profitability ratio measured by net profit margin (NPM), basic earning power (BEP) and contribution margin (CM) against to firm value measured by price book value (PBV).

**Table 2: The coefficient of determination (R<sup>2</sup>)**

**Model Summary**

Model	R	Adjusted R Square		Std. Error of the Estimate	Change Statistics			Sig.	
		R Square	Change		F	df1	df2		F Change
1	.792 <sup>a</sup>	.627	.599	6.57528	.627	22.375	3	40	.000

a. Predictors: (Constant), Contribution Margin , Basic Earning Power , Net Profit Margin

Source: Output SPSS, 2017

Based on the table above, it shows that the value of R square obtained is 0,627 which showed that the firm value measured by price book value (PBV) influenced by variables of profitability ratio measured by net profit margin (NPM), basic earning power (BEP) and contribution margin (CM) is 62,7 %, and the remaining 37,3% is influenced by other variables that have not been examined in this study. By looking at the high coefficient indicates the effect of variables, the independent variable on the dependent variable was also high at 62,7%.

**Partial Test (Test t):** Partial test (t test) was performed to determine whether a variable net profit margin (NPM), basic earning power (BEP) and contribution margin (CM) affect the price book value (PBV) partially.

**Table 3: Partial Test Results (Uji t)**

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	1.948	1.983		.983	.332
	Net Profit Margin	1.074	.394	.885	2.727	.009
	Basic Earning Power	.180	.151	.286	1.193	.240
	Contribution Margin	-.349	.115	-.560	-3.035	.004

a. Dependent Variable: Price Book Value

Source: Output SPSS, 2017

The table above shows the t-test result are: The profitability ratio as measured by net profit margin (NPM) has positive and significant effect on firm value as measured by price book value (PBV), based on the test result, it is obtained t-value of 2,727 with significance level 0,009. The profitability ratio as measured by basic earning power (BEP) has positive and insignificant effect on firm value as measured by price book value (PBV), based on test result, it is obtained t-value of 1,193 with significance level 0,240. The profitability ratio as measured by contribution margin (CM) has negative and significant effect on firm value as measured by price book value (PBV), based on test result, it is obtained t-value of -3.035 with significance level 0,004.

**Effect of Net Profit Margin to Price Book Value:** Profitability ratio as measured by net profit margin has positive and significant effect to firm value as measured by price book value in Food and Beverage industry listed in Indonesian Stock Exchange. This means that when net income rises, then total sales will increase, it indicates that management experience success in terms of operations and this will lead to increased investor confidence to invest in the food and beverage industry. The greater the ratio of net profit margin, the better the company's ability to earn a high profit. Rinati (2008) states that the greater the net profit margin then the company performance will be more productive, so it will increase investor confidence to invest in the company, with the increase of investors will affect the stock price of the company that will increase. The results of this study support the research Mardiyati et al (2012) which shows that net profit margin has positive and significant effect in firm value. The higher the value of net profit margin the higher net profit generated from each sale and this shows that the performance of management within the company either, of course will attract investors to invest. The more investors who invest in the company then the stock price of the company will rise. But the results of this study do not support the research undertaken by Pratiwi and Priyadi (2014) which shows that the net profit margin does not affect the size of the resulting return that will directly affect the firm value that will decrease. This is because the company is not able to generate profits for the company that affects investors and potential investors to make investments. At this time, investors are not willing to buy stocks with high prices with a low net profit margin value of the company, resulting in net profit margin does not affect the company rate of return. This is because the high level of net profit margin does not necessarily attract investors to invest.

**Effect of Basic Earning Power to Price Book Value:** Profitability ratio as measured by basic earning power has positive and insignificant effect to firm value as measured by price book value in food and beverage industries listed in Indonesian Stock Exchange. This means that the Food and Beverage industry has not been able to generate profits from assets before taxes and leverage, since large profits have not become a measure that the company has worked efficiently because it can efficiently be known by comparing profits earned by companies with wealth or capital to generate profits. This means that the capital working in a company is only the operating capital or operating assets, as well as the profit that is taken into account only the profits derived from the operating company that is net operating income. Brigham and Houston (2011) stated basic earning power shows the ability of the company to generate profits from the company's assets, before the influence of taxes and leverage which means if basic earnings power increases, then the company's profits will increase. The results of this study support the research Fitriyanti (2016) which shows that basic earning power has no significant effect on stock return. It can prove how much asset ability the company has to generate returns or earnings. The increasing BEP value shows an increase in the ability of the company assets to generate operating profit. Thus the high BEP variable so the profit generated on stock return will increase as well so that investors invest in the company. This means that if the basic earning power is higher, the more likely the value of the firm increases as reflected by the high valued stock price.

**Effect of Contribution Margin to Price Book Value:** Profitability ratio as measured by contribution margin has a negative and significant impact to firm value as measured by the price book value in Food and Beverage industry listed in the Indonesian Stock Exchange. This means that the Food and Beverage industry has not been able to generate profits from sales of its products caused by the selling price down so that the amount of contribution margin cannot be used to cover all fixed costs and have not been able to generate profits resulting in loss in the period concerned. Sunarto (2014), the change of selling price is very influential to the contribution margin, where if the selling price rises, the contribution margin will increase and the profit level of the company will rise also. Conversely, if the selling price decreases, the contribution margin will also decrease which means the profit becomes low followed by the decrease of firm value. The results of this study do not support the research Silvana et al. (2014) which shows that contribution margin can be used for sales planning and profit, making it easier for management in decision making. Contribution margin for sales planning is used as a sales decider at break event point, expected rate of return and margin of safety of the sales conditions and who determines which product sales can optimize earnings. For companies that produce and sell a variety of products, this analysis is very useful to know the amount of profits generated from all levels of sales and sales of each product. This is because the greater the contribution margin and the profit generated, the company will be willing to spend more on producing the highest margin contribution product, and the company is willing to spend more on marketing products that have high contribution margin in order to optimize profit.



## 5. Conclusion

Based on the data analysis that has been described in previous chapters, it can be concluded as follows: 1) profitability ratio as measured by net profit margin has positive and significant effect to firm value as measured by price book value, 2) profitability ratio as measured by basic earning power has positive and insignificant effect to firm value as measured by price book value, and 3) Profitability ratio as measured by contribution margin has a negative and significant impact to firm value as measured by the price book value.

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## The Effect of Emotional Intelligence Dimensions on Enhancing Employees' Eustress at work

Sultan Ali Suleiman Almazrouei  
Ministry of Education, Sultanate of Oman  
sultanalmazrouei@hotmail.com

**Abstract:** This paper aims to investigate the effect of dimensions of emotional intelligence which include self-emotions appraisal, other-emotions appraisal, use of emotions, and regulation of emotions on enhancing employees' eustress at work. A quantitative survey was applied on 483 employees from ministry of education in Oman. PLS based SEM was utilized for analyzing data. The findings showed a significant positive association between others-emotions appraisal, use of emotions, regulation of emotions and employees' eustress. However, self-emotions appraisal does not influence employees' eustress significantly. Therefore, managers should foster employees' emotional intelligence (others-emotions appraisal, use of emotions, regulation of emotions) to enhance employees' eustress which is essential for work success. Some training sessions pertaining emotional intelligence should be held.

**Keywords:** *Emotional intelligence, Eustress, PLS based SEM*

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### 1. Introduction

Job stress is a big challenge for organizations since it hinders employees' performance and results in turnover. Jehangir et al. (2011) argues that "job stress is increasingly becoming an epidemic in the work environment". Similarly, Hashim et al. (2012) argues that one of the biggest challenges organizations face is occupational stress. Hilton and Whiteford (2010) conclude that occupational stress affects workplace negatively. It makes employees depressed (Siegrist, 2008), and deteriorates mental and emotional functions (Von Onciul, 1996). Moreover, stress impacts organizations production negatively and enhances sickness payments (Cooper, 2001). However, having a reasonable amount of stress (eustress) enhances employees' performance. Le Fevre et al. (2003) believes that eustress facilitates work success. It inspires individuals to be determined, confident and persistent (Stewart, 2006). Eustress inspires employees to work harder to overcome challenges and accomplish the desired goals (Polson, 2009). Therefore, there is a great value to investigate factors that enhance employees' eustress. This study attempts to provide evidence by investigating the effect of employees' emotional intelligence on enhancing employees' eustress.

**Eustress:** There are two types of stress: distress and eustress. Distress occurs when there is an excessive demand that exceeds individual's abilities which mean "a negative response resulting from the evaluation of a particular event with a degree of disfavor (Simmons, 2000)". However, eustress stems from reacting to situation in moderate stress in which reasonable amount of stress, anxiety, and pressure are placed on the body and causes him to perform highly (Le Fevre et al., 2003). Eustress is defined as "the positive response to work demands" (Simmons & Nelson, 2001). Levinson (2004) stated that "Hans Selye in 1956 coined the term eustress (from the Greek root "eu" for good) which means the healthy, positive, constructive outcome of stressful events and the stress response". Dudgeon (1992) states that Dr. Keith Berndtson defines eustress as "positive stress which challenges us to achieve our life plans and projects and does not throw us out of equilibrium". Simmons (2000) argues that eustress is "a positive stress resulting from the evaluation of a particular event with a degree of favor". According to Simmons and Nelson (2001) there are three dimensions of eustress related to positive psychological states which are hope, positive effect, and meaningfulness. The positive psychological state grants employee's energy and confidence which results in employees' healthy life (Simmons, 2000). Eustress leads to employees' wellbeing (Hargrove, 2012) and job satisfaction (Sisley, 2010). Kozusznik et al. (2012) state that eustress promotes psychological health in the form of work engagement. Hence, top management is advised to urge individuals to perceive their jobs positively to enhance their employees' engagement. Eustress enhances efficiency and performance (Benson & Allen, 1980).

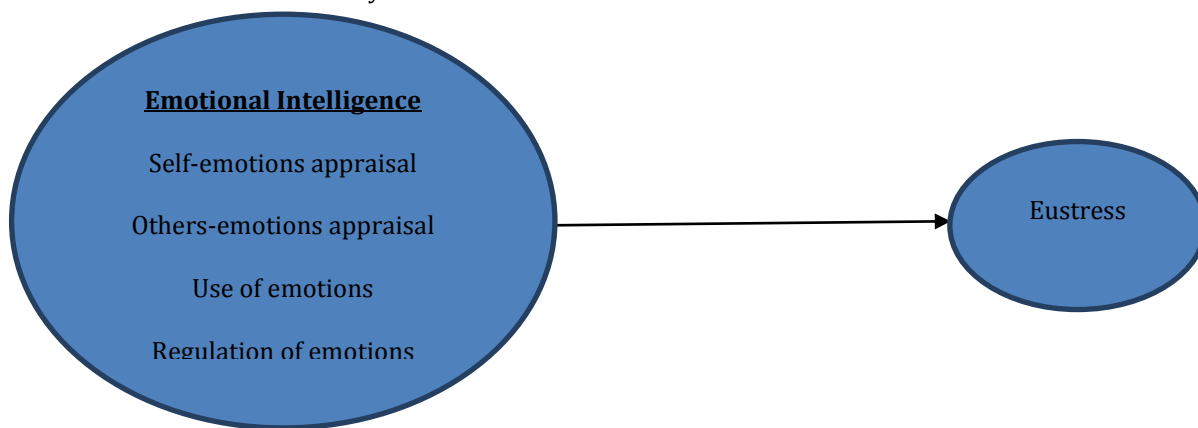
**Emotional intelligence:** In 1995 Daniel Goleman published a book about emotional intelligence that provides a new era to understand and assess individuals' attitudes, behaviors, emotions, and interpersonal skills. Ermer et al. (2012) state that many researches define emotional intelligence as "The ability to perceive

and express emotions, understand and reason with emotion, and regulate emotion in self and others". Emotional intelligence is important in any organization. Therefore, it should be considered in human resources planning, recruitment interviewing and selection, job profiling, management development, and customer relations and service (Iuscu et al., 2012). Different models and theories have been adopted for emotional intelligence. The first one who proposed a model for emotional intelligence is Goleman in 1995. He views emotional intelligence as a set of social and emotional competencies that encompass five dimensions: self-awareness; self-regulation; self-motivation; social-awareness; and social skills (Labba et al., 2011). Goleman (1998) defines emotional intelligence as the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships (Livingston & Doerr, 2012). However, in 1997 Mayer and Salovey proposed another model for emotional intelligence in which they consider emotional intelligence as ability (Brackett & Salovey, 2006). They argue that emotional intelligence consists of four branches which are: ability to perceive emotions, ability to use emotions for thought, ability to understand emotions, and ability to manage emotions in self and others (Ma et al., 2010). In 1997 Bar-on proposed another model for emotional and social intelligence. It consists of five skills and abilities: intrapersonal skills, interpersonal skills, stress management, adaptability and mood (Mayer et al., 2000).

**Emotional Intelligence and Eustress:** There are also studies that link emotional intelligence with stress. Nikolaou and Tsaousis (2002) examined the relationship between emotional intelligence and sources and outcomes of occupational stress. The respondents consist of 212 individuals from mental health organizations. The results indicated that individuals with high scores in emotional intelligence suffer less stress in the occupational environment. Similarly, Satija and Khan (2013) examined the impact of emotional intelligence on occupational stress of 150 working professionals. The result indicates that professionals with high scores in emotional intelligence suffer less stress in their work environment. Singh and Jha (2012) study revealed that faculty from private medical and engineering colleges who are highly emotional intelligent feel less stressed which leads to better performance. Likewise, Singh and Sharma (2012) study proved the importance of emotional intelligence in reducing stress. From the above discussion, it is obvious that few empirical researches that have linked emotional intelligence with eustress. Therefore the study hypotheses would be as follows:

- H1: Self-emotions appraisal enhances an employee's eustress
- H2: Others-emotions appraisal enhances an employee's eustress
- H3: Use of emotions enhances an employee's eustress
- H4: Regulation of emotions enhances an employee's eustress

The framework of the study would be as follows:



## 2. Methodology

**Sampling and Data Collection Procedures:** The study sample includes employees from Batinah North Governorate from ministry of education in Sultanate of Oman. Convenience sampling technique is used for

collecting data to save time and effort. Representatives from targeted schools are assigned by the researcher to apply the study questionnaire on the samples and to attend to their questions. The total number of questionnaires received was 504; however, 21 were not complete so they were excluded. Therefore, only 483 (Male: 232, Female: 251) questionnaires were analyzed.

**Emotional Intelligence:** Wong and Law (2002) developed a questionnaire to measure emotional intelligence (WLEIS). It consists of four dimensions namely: Self-Emotions Appraisal (SEA), Others-Emotions Appraisal (OEA), Use of Emotion (UOE), Regulation of Emotion (ROE), and includes 16 items. Self-Emotions Appraisal (SEA) assesses the individual's self-perceived ability to understand his or her emotions. Others-Emotions Appraisal (OEA) measures the self-perceived ability to recognize and understand other people's emotions. Use of Emotion (UOE) measures the self-perceived tendency to motivate oneself to enhance performance. Regulation of Emotion (ROE) focuses on the self-perceived ability to regulate one's emotions. Respondents were asked to indicate on a five likert scale ranging from (1) never to (5) always. Details pertaining the questionnaire's dimensions are as the following:

**Table 1: Items constituting emotional intelligence scale**

Dimension	items
Self-Emotions Appraisal	1. I have a good sense of why I have certain feelings most of the time.
	2. I have good understanding of my own emotions.
	3. I really understand what I feel.
	4. I always know whether or not I am happy.
Others-Emotions Appraisal	5. I always know my team members' emotion from their behaviour.
	6. I am a good observer of other's emotions.
	7. I am sensitive to the feelings and emotions of others.
	8. I have good understanding of the emotions of people around me.
Use of Emotion	9. I always set goals for myself and then try my best to achieve them.
	10. I always tell myself that I am a competent person.
	11. I am motivated to do a task without needing pressure from others.
	12. I would always encourage myself to try my best.
Regulation of Emotion	13. I am able to control my temper and handle difficulties wisely.
	14. I am quite capable of controlling my own emotions.
	15. I can always calm down quickly when I am angry.
	16. I have good control of my own emotions.

**Eustress:** O'sullivan (2011) developed a scale to measure eustress at work. It consists of 15 items (5 of them are filler questions (irrelevant questions so it has been deleted). Therefore, the total number of items used in this study questionnaire is 10. The higher score indicates higher level of eustress. Since O'sullivan scale developed purposely for identifying the level of eustress of college students, the researcher adapted the scale to fit with the population of this research. For example; Items (3,5,6,8,9): the word "academic" is replaced by the word "occupational" to be consistent with the study purpose. Item (7) replacing the word "schoolwork" with "your job". Item (10) replacing "stress for an exam" with "stress to do a job". All the questionnaire items are positive except items 6 and 7. The respondents were asked to indicate on a Likert scale ranging from 1= "never" to 5="always". Details pertaining the questionnaire items are presented in the following table.

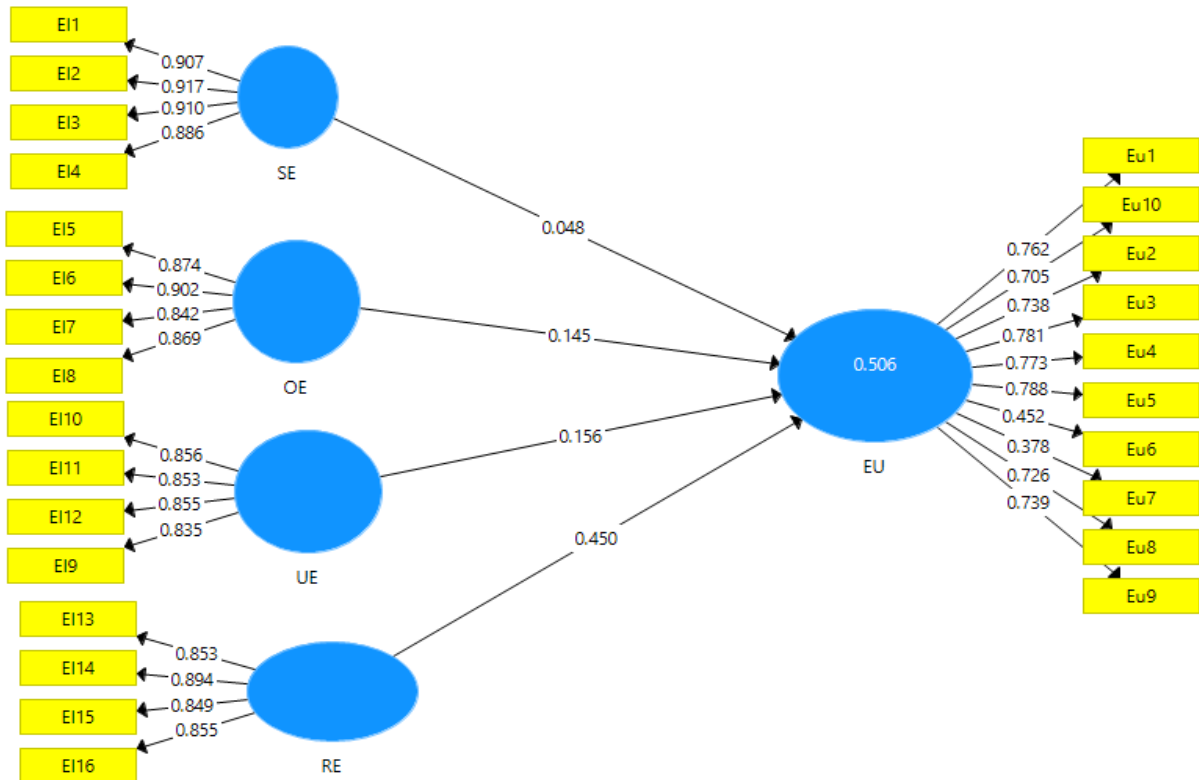
**Table 2: Items constituting eustress scale**

item	scale items
1	I cope effectively with stressful changes that occur in my occupational life.
2	I deal successfully with irritating professional hassles.
3	I feel that stress positively contributes to my ability to handle my occupational problems.
4	In general, I feel motivated by stress.
5	In general, I am able to successfully control the irritations in my occupational life.
6	In general, I fail at any occupational task when under pressure.
7	In general, I am unable to control the way I spend my time on my job.
8	When faced with occupational stress, I find that the pressure makes me more productive.
9	I feel that I perform better on an assignment when under occupational pressure.
10	I feel that stress to do a job has a positive effect on the results of my job.

### 3. Results

**Individual item reliability:** In order to ensure that the questionnaire items measure the study constructs and consequently ensuring the questionnaire reliability, Measurement Model (or outer model) is analysed by PLS. To indicate reliabilities of individual items, the researcher looked at their loadings to their respective constructs (Hulland, 1999). Hulland (1999) states that the loadings that are less than 0.50 should be dropped. All loadings of items exceeds 0.50 except two items related to eustress construct (Eu6, Eu7) is below 0.5 which is dropped.

**Figure 1: Study Model convergent validity**



**Convergent validity:** The examination of convergent validity, which means the degree to which multiple indicators measure the same construct are in agreement, is conducted. Hair et al. (2010) suggest that factor loadings, composite reliability and average variance extracted are used to assess convergence validity. The loadings for all items exceeded the recommended value of 0.50 (Hair et al., 2010). Composite reliability values exceeded 0.70 which ranges from 0.912 to 0.948. The average variance extracted (AVE) measures the

variance captured by the indicators relative to measurement error, and it should be greater than 0.50 to justify using a construct (Barclay et al., 1995). The average variance extracted, were in the range of 0.581 and 0.819.

**Table 3: Measurement Model - Reflective Construct**

Construct	Measurement Item	Loadings/ Weight	AVE	CR
SE	EI1	0.907	0.819	0.948
	EI2	0.916		
	EI3	0.911		
	EI4	0.886		
OE	EI5	0.875	0.760	0.927
	EI6	0.901		
	EI7	0.841		
	EI8	0.870		
UE	EI9	0.837	0.723	0.912
	EI10	0.856		
	EI11	0.854		
	EI12	0.854		
RE	EI13	0.854	0.745	0.921
	EI14	0.894		
	EI15	0.849		
	EI16	0.853		
Eustress	Eu1	0.765	0.581	0.917
	Eu10	0.726		
	Eu2	0.737		
	Eu3	0.793		
	Eu4	0.786		
	Eu5	0.791		
	Eu8	0.749		
	Eu9	0.748		

Note:

Composite reliability (CR) = (square of the summation of the factor loadings) / {(square of the summation of the factor loadings) / (square of the summation of the error variances)}

Average variance extracted (AVE) = (summation of the square of the factor loadings) / {(summation of the square of the factor loadings) / (summation of the error variances)}

**Construct validity:** Cross-loadings were computed to determine if the items loaded on the other constructs equally as well as on their theorized construct. It is observed that all the items measuring a particular construct loaded highly on that construct and loaded lower on the other constructs thus confirming construct validity. For cross-validated items to be included in the finalized data set, the loading must be larger on the intended construct than any other construct. This was achieved.

Figure 2: Study model construct validity

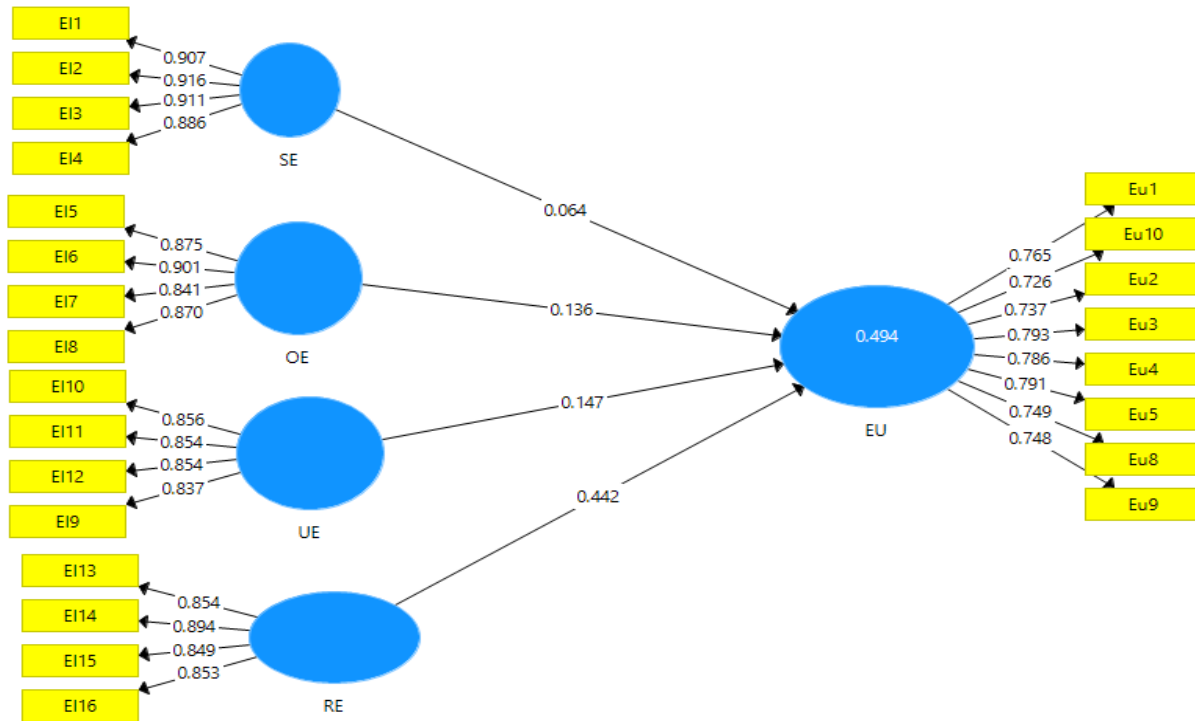


Table 4: factor loading

	EU	OE	RE	SE	UE
EI1	0.564	0.648	0.619	0.907	0.704
EI10	0.434	0.567	0.513	0.635	0.856
EI11	0.518	0.565	0.573	0.622	0.854
EI12	0.522	0.612	0.639	0.698	0.854
EI13	0.585	0.554	0.854	0.609	0.623
EI14	0.585	0.564	0.894	0.602	0.603
EI15	0.573	0.531	0.849	0.546	0.564
EI16	0.560	0.480	0.853	0.526	0.533
EI2	0.518	0.660	0.620	0.916	0.687
EI3	0.513	0.658	0.587	0.911	0.688
EI4	0.449	0.682	0.566	0.886	0.679
EI5	0.532	0.875	0.594	0.693	0.602
EI6	0.479	0.901	0.538	0.629	0.578
EI7	0.411	0.841	0.474	0.602	0.603
EI8	0.507	0.870	0.535	0.615	0.627
EI9	0.513	0.600	0.554	0.633	0.837
Eu1	0.765	0.551	0.645	0.646	0.607
Eu10	0.726	0.312	0.411	0.283	0.304
Eu2	0.737	0.474	0.548	0.494	0.523
Eu3	0.793	0.441	0.509	0.464	0.494
Eu4	0.786	0.337	0.441	0.280	0.345
Eu5	0.791	0.512	0.590	0.562	0.527
Eu8	0.749	0.310	0.376	0.251	0.319
Eu9	0.748	0.299	0.392	0.221	0.255

**Discriminant validity:** Finally, as a means of evaluating discriminant validity, the average variance extracted for each construct should be greater than the squares of the correlations between the construct and all other



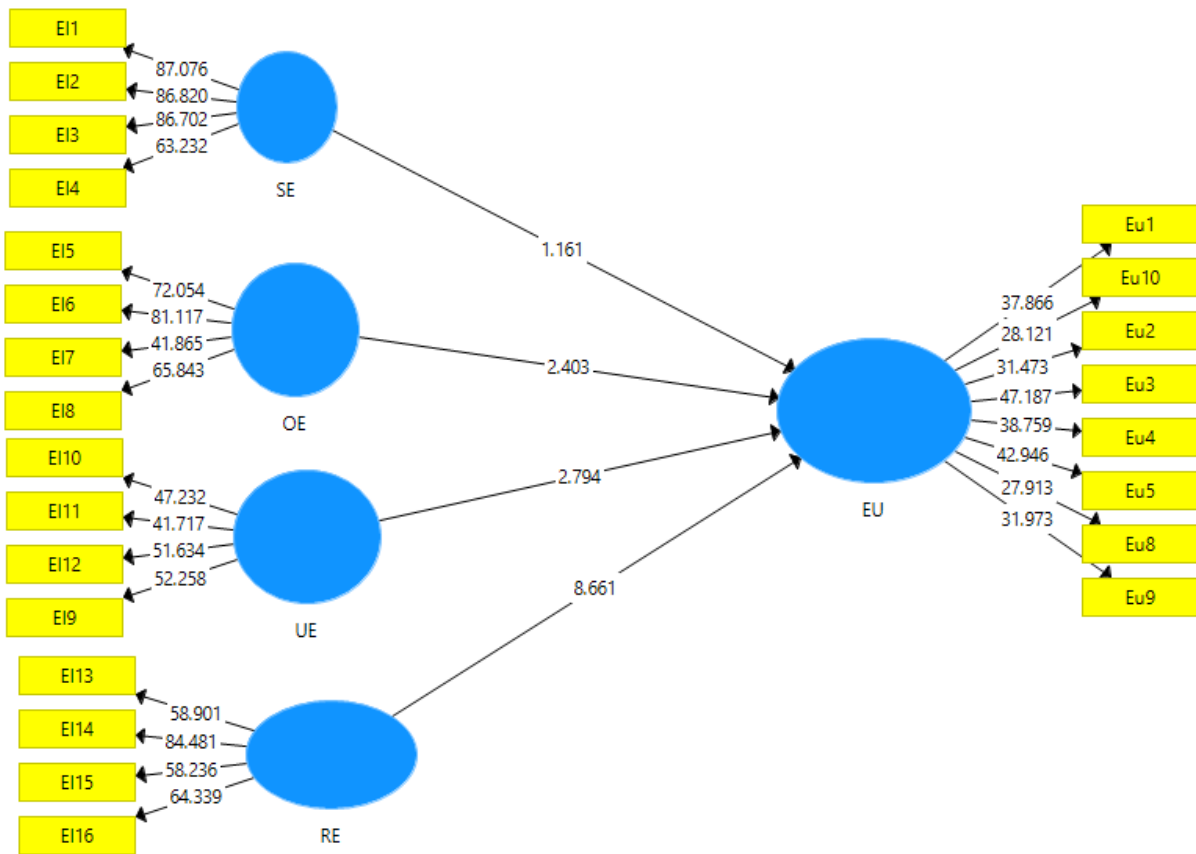
constructs (Barclay et al. (1995). Equally important, the correlations between the constructs should be lower than the square root of the average variance extracted (Gefen et al., 2000). As shown in the following table, all of the average variance extracted (AVE) are greater than the recommended 0.50 level. Likewise, the square root of the average variance extracted (as shown on the diagonal, in bold) is greater than the correlations between the constructs.

**Table 5: Discriminant validity of constructs**

	<b>EU</b>	<b>OE</b>	<b>RE</b>	<b>SE</b>	<b>UE</b>
EU	<b>0.762</b>				
OE	0.557	<b>0.872</b>			
RE	0.667	0.618	<b>0.863</b>		
SE	0.568	0.730	0.662	<b>0.905</b>	
UE	0.588	0.690	0.674	0.762	<b>0.850</b>

Diagonal (in bold) represent square root of average variance extracted (AVE), other values are correlations.

**Figure 3: Structural Model**



**Emotional Intelligence dimensions and Eustress:** By applying computed T-statistics, the path loadings between constructs are calculated to identify significance. All of the data were run using 500 bootstrapped samples. Path coefficients in the structural model may be significant, but their size may be so small that they do not warrant managerial attention. T value represents the estimated change in the endogenous construct for a unit change in a predictor construct. Looking at the relative importance of the exogenous driver constructs in predicting the dependent construct eustress, we see that regulation of emotions (RE) (t value= 8.661) is most important, followed by use of emotions (UE) (t value= 2.794), then others-emotions appraisal



(OE) (t value= 2.403) and finally self-emotions appraisal (SE) (t value= 1.161) which has little influence on eustress. Based in T values, H2, H3, H4 are accepted, but H1 is rejected.

**Table 6: Path coefficients of exogenous constructs**

hypotheses		T (value)	decision
H.1	SE -> EU	1.161	Not supported
H.2	OE -> EU	2.403**	supported
H.3	UE -> EU	2.794**	supported
H.4	RE -> EU	8.661**	supported

\*\* p<0.01 (2.33), \*p <.0.05 (1.645)

**Discussion of findings:** The results showed a positive significant association between emotional intelligence dimensions (Others-Emotions Appraisal (OEA), Use of Emotion (UOE), Regulation of Emotion (ROE)) and experiencing eustress at work. This result is in accordance with some previous studies like (Nikolaou & Tsaousis, 2002; Satija & Khan, 2013; Singh & Jha, 2012). Emotional intelligence helps employees overcome work-related difficulties and increase positive behaviors. This is because as Sigmar et al. (2012) found that emotional intelligence increases communication among individuals. Similarly, Jordan et al. (2002) showed that highly emotional intelligent individuals experience positive emotional reactions to difficulties and adapt positive coping strategies. Definitely, that assists them experience eustress. Thus, H2, H3 and H4 are supported.

**Implications of the study:** This study adds knowledge to literature by confirming the importance of emotional intelligence dimensions on enhancing employees' eustress at work. Emotional intelligence is a significant element which should be considered in organization policy as it facilitates employees' eustress. Managers should conduct or arrange workshops related to the strategies that increase emotional intelligence capabilities. Also, emotional intelligence should be considered in organizations during selection and recruitment processes and even in allocating duties to employees. That would lead to employees' ability to deal effectively with stressful situations and job demands and consequently positive organizational outcomes would be attained.

**Limitations and future researches:** The limitation of the study is related to samples of the study which is application of the questionnaire is only on teachers from one governorate. Therefore, future studies should include different jobs in ministry of education and more governorates should be targeted.

#### 4. Conclusion

Eustress is one of the critical factors that affect organization performance greatly. Therefore identifying the factors that enhance employees' eustress is of a great benefit. Because there is a few empirical researches that relate employees' emotional intelligence to their eustress, This study focus on investigating the impact of emotional intelligence dimensions on enhancing eustress on a sample from ministry of education in the Sultanate of Oman. PLS based SEM is used to analyze the data. The results showed a significant positive relationship between emotional intelligence dimensions (Others-Emotions Appraisal (OEA), Use of Emotion (UOE), Regulation of Emotion (ROE) and experiencing eustress at work. Therefore, managers should consider individuals' emotional intelligence in recruitment and selection process and hold workshops to their employees in how to be intelligent emotionally which would be reflected on organizational strategic goals positively.

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## Factors Hindering the Adoption of Business-to-Consumer (B2C) in Developing Countries: A Case Study of Sudan

Abdelaziz Musbah, Mira Kartiwi  
International Islamic University Malaysia, Malaysia  
amus2007@yahoo.com, arrairy@gmail.com

**Abstract:** It has been commonly reported that e-commerce (electronic commerce) offers viable solutions to businesses in meeting the challenges of an environment that is undergoing changes. This study seeks to explore the factors that influence the adoption decision of Business-to-Consumer (B2C) e-commerce, using Sudan as a case study. The mixed method design was adopted in two stages in which both exploratory and descriptive research approaches were undertaken. Data was collected from enterprises by questionnaire and through the analysis of research and semi-structured interviews. The findings revealed that most enterprises in the country are still in the initial stages of adoption of B2C e-commerce despite the wide growth of Internet use among enterprises in Sudan. Many factors could be responsible for the low usage of e-commerce among the enterprises in Sudan. Technical barrier is seen as the major barrier that affects the adoption of B2C e-commerce. However, this is accompanied by regulatory and legal barriers. One of the factors that inhibit e-commerce adoption in SMEs in Sudan is the lack of Internet security. Other factors include limited use of web portals and Internet banking by enterprises. The use of credit card and visa card is prohibited in Sudan due to the sanction from the United States of America. However, these issues resulted in all type of transactions that involves carrying cash. This makes it risky for customer who carry huge sum of money. In order to improve B2C e-commerce adoption technologies, this study plays a significant role to organizations and supporting organizations, especially those operating in countries with a unique situation like Sudan.

**Keywords:** *Business-to-Consumer (B2C), Developing countries, E-Commerce Factors, Sudan*

### 1. Introduction

Business-to-consumer usually has a major focus on business transactions that takes place between businesses and consumers (Duncombe & Heeks, 2001). Despite the benefits and rapid growth of e-commerce, it has been indicated that only large organizations have obtained the benefits of e-commerce (MacGregor & Kartiwi, 2010; MacGregor & Vrazalic, 2005; Riquelme, 2002); though SMEs being at a low level relatively. Consequently, this situation is common in many developing countries (Kapurubandara & Lawson, 2006). There has been a continuous steady growth in B2C e-commerce, despite the dot-com failures in 2000s (Van Slyke et al., 2004). This growth took place in both developed and developing countries, resulting in a community of more comprehensive online buyers (Cyr et al., 2004). Some studies stated that consumers are not willing to involve themselves in e-commerce activities which relates to cost, security, and privacy concerns (Azam & Shah, 2007). In particular, the study has four objectives in exploring and describing. These factors are: (1) Factors affecting the adoption of B2C e-commerce by organizations in Sudan, (2) The impact of political and economic conditions, and government policies on B2C e-commerce growth among organizations in Sudan, (3) The current e-commerce adoption level for organizations in Sudan, and (4) Organizations perception of B2C e-commerce implementation and adoption. The factors that affect e-commerce adoption of an organization in developing countries play a significant role to the organization, the public, as well as the government. Organizations can consider the most effective means of utilizing the advantages of e-commerce in improving their business efficiency and in promoting the growth of their business. The proposed research exposes some of the problems of various policies in government. The research also suggests possible solutions for the policies to meet the requirement of the businesses and whether it is feasible and implementable on the ground.

**Aims and objectives:** This study aims to develop a framework, and identifies the factors affecting Business-to-Consumer (B2C) e-commerce in Sudan. The objectives of this study include: to explore the major barriers that affects Business-to-Consumer (B2C) adoption; to perform an in-depth investigation on factors that affects B2C adoption in Sudan; to develop the framework for adoption of B2C e-commerce in Sudan; to make specific recommendations in eliminating the problems affecting B2C adoption in Sudan; and to validate the framework.

## Research Questions

*What are the factors that affect the B2C e-commerce adoption by SMEs in Sudan?*

To facilitate a detailed exploration of the overall research question, the question was divided into manageable questions as follows:

- What are the key factors affecting B2C e-commerce adoption by SMEs in Sudan?
- How have government policies, economic, and political conditions affected B2C e-commerce growth in SMEs?
- What is the e-commerce adoption level for SMEs in Sudan?
- What perception does SMEs in Sudan have towards B2C e-commerce?
- What factors drive SMEs in Sudan into e-commerce adoption?

## 2. Literature Review

**Critical Success Factors (CSFs):** According to Collis and Hussey (2003), a theoretical framework involves the process of obtaining models and theories from study findings. Consequently, it is regarded as a basic part of positivist research since it addresses both the research questions and hypotheses. In this paper, the factors identified through the literature review and how this would affect the implementation of E-commerce creates the theoretical framework as follows:

**Environmental Context:** Environmental factors have a significant effect on online environment and e-commerce activities. As a result, it affects businesses in general and customers in particular. However, the most highlighted issues include:

**ICT Infrastructure:** Tangpong et al. (2009) stated that the availability of technological infrastructure is the key to the e-commerce adoption. In Sudan, there is poor or unreliable internet connectivity which is attributable to epileptic power supply and poor telephone communication (Lawrence & Tar, 2010). In ICT, Sudan has made enormous progress in liberalizing the sector. Due to this progress, it has attracted significant private capital. Recently, connectivity to an undersea fiber-optic cable has led to expansions for accessibility, price reduction, and quality improvements (Rupa & Cecilia, 2011). Sudan, in recent decades, has built and benefited from ICT. Development of ICT in Sudan is evident in a major expansion of the infrastructure and capital investment, including systems and human capital management (Elamin, 2004).

**Public Awareness:** Hunaiti, Masa'deh, Mansour and Al-Nawafleh (2009) identified that unawareness among individuals as a major factor which hinders e-commerce adoption. They stated the importance for individuals to have access to services at the same time, and knowing how to use them.

**Economic and Political Conditions:** The economic condition of a place is a major drive for the adoption of e-commerce (Lawrence & Tar, 2010; Molla, 2005). Furthermore, it was argued by Lawrence and Tar (2010) that the establishment of technology infrastructure in most developing countries exceeds their ability by far. Hence, the growth of e-commerce in countries with unfavorable economic conditions is slow relatively (Lawrence & Tar, 2010). The unstable economic condition of some countries affects their involvements in the development of ICT (Matula & Van Brakel, 2007).

**Government Initiatives, Legislation, and Support:** The role of government in providing various forms of intervention has been cited as a catalyst for SMEs e-commerce development (Southern & Tilley, 2000; Sarosa & Zowghi, 2003; Thatcher et al., 2006; Martinsons, 2008). Researchers (Dunt & Harper, 2002; Chan & Al-Hawamdeh, 2002; Martinsons, 2008) noted that the developed countries' ability to adopt and use e-commerce and e-business at advanced levels has been greatly enhanced by their government's proactive role in providing the enabling infrastructure for e-commerce to thrive. This is often lacking in developing countries, as their governments are concern with issues of poverty and hunger eradication (OECD, 2004). Chan and Al Hawamdeh (2002) provide an example of the role of government in the development of e-commerce in Singapore where deliberate steps have been taken to improve e-commerce infrastructure by



enacting favorable e-commerce laws. Unfavorable government and regional policies stifle creativity among SMEs, threatening the existence of this sector in the economy.

**Logistics Infrastructure:** Fast development and growth of e-commerce in the US can be a result of infrastructure already in place. It can also occur due to a physical delivery method that is easily available. Such systems are less in developing countries (Hawk, 2004). One of the key for e-commerce is a logistic infrastructure that is effective. In Sudan, the absence of mailboxes for homes serves as a limitation to retailing online. A delivery method of products to housing location is supported through the provision of the appropriate infrastructure required.

**Organizational Context:** Organizational factors are defined from the nature and characteristic of the firm itself, usually making it unique to the firm. Cloete (2002) and Cloete et al. (2001) stated that the organizational factors which affects the adoption and implementation of e-commerce include; the inability to have access to hardware and software, inadequate time to scrutinize information and options, poor knowledge about the methodologies and models of e-commerce, and poor accessibility to computers. The factors were classified into the characteristics of owner/manager, firm's characteristics, and the poor access to financial resources.

**Owner/Manager Characteristics:** Most factors that hinder e-commerce adoption in organizations are related to the characteristics of the owners/managers (Kapurubandara & Lawson, 2006; Kirby & Turner, 1993). There is a lack of awareness of the potential benefits of e-commerce adoption by business owners (Lacovou, Benbasat & Dexter, 1995). They mostly do not understand and appreciate the potential benefits of adopting e-commerce services (Kapurubandara & Lawson, 2006); therefore, they less likely adopt e-commerce for lack of knowledge or ignorance on the use of computer technology (Cloete, Courtney & Fintz, 2002; Kapurubandara & Lawson, 2006; Kirby & Turner, 1993; Lacovou et al., 1995; Matula & Van Brackel, 2007).

**Firm Characteristics:** There are a number of factors which affect e-commerce adoption by the organizations. In an organization, the amount of technology presently being used in an organization, such as PCs with modems and the use of e-mails, can make adoption easier (Lacovou et al., 1995). The determinant criteria as to whether or not e-commerce services will be adopted by an organization has a great impact on whether or not an organization will adopt e-commerce services.

**Financial Infrastructure:** Graham and Cobham (2006) stated that the top management's willingness to fund an e-commerce adoption project is a clear reflection of financial readiness. Therefore, the major cost for the adoption of e-commerce involves the training and educating of employees/management on the use/application of e-commerce (Graham & Cobham, 2006). According to Nelson and Shaw (2003), the rate of e-commerce adoption is affected by financial feasibility. Some examples of innovations which affect consumers are debit and credit cards, e-banking, automated teller machines (ATMs), and stored value cards. Furthermore, innovations which promote online commerce include encrypted credit cards, smart cards, e-cash, and e-checks. In developing countries, these methods of payment are very common. In particular, because of US laws and regulations, credit cards are generally not allowed to be used in prohibited countries, including Iran, Burma (Myanmar), Sudan, and Cuba. Hence, the only exception is Diners Club, which is accepted by the Khartoum Hilton. All transactions have to be in cash, making it unsafe for visitor carrying large sums of money with him.

**Lack of Credit Cards and Payment Systems:** In transactions between consumers and SMEs (also known as C2B), the lack of ownership of credit cards in Southern Africa has prevented many people from participating in e-commerce activities (Shemi & Magembe, 2002). Some organizations have also been prevented from advancing to e-payment operations due to lack of appropriate e-commerce payment systems.

**Lack of Financial Resources:** Among the many challenges that hinder development of e-commerce in firms is the issue of finance as it relates to the amount of financial resource utilized by an enterprise to start up, buy the necessary ICT infrastructure for the implementation of e-commerce, paying consultancy fees and training personnel, and maintenance of websites and other infrastructure (Mutula & Van Brakel, 2007; Lee et al., 2003; Sarosa & Zowghi, 2003). According to Kauffmann (2005), the growth of SMEs in Africa is hampered by

their limited access to finances. Furthermore, their security is not sure; unpredictable; and due to their sectoral and regional focus, they have few risks scope of sharing.

**Technological Context:** In most developing countries, slow speed of telecommunication networks and the lack of Internet connectivity have greatly contributed to the delay in e-commerce adoption (Mutula & Van Brakel, 2007). Despite the availability of Internet connectivity, its continued use in SMEs is hampered by epileptic power supply, commonly in the rural areas of the country (Mutula & Van Brakel, 2007). Among managers, there is a general fear that e-commerce and ICTs are both a complex phenomenon (Magembe & Shemi, 2002). Perceived benefits possess a significant factor that affects the several studies adoption (Iacovou et al., 1995; Kuan & Chau, 2001; Rogers, 1995). Thus, perceived benefits include both indirect and direct benefits. Therefore, these benefits are gotten from the adoption of technology. If the management of an organization have good understanding of the various benefits and if it does not perceive the technological innovation in a positive way, then the organization is less likely to adopt the technology in a method that is active (Iacovou et al., 1995; Kirby & Turner, 1993). Furthermore, in any online transactions, risks and security is considered as a very important factor which determines the level of the adoption of e-commerce.

**Concerns on Trust, Confidentiality, and Security:** The term “trust” can be referred to as a major determinant in e-commerce adoption. When compared with tradition commerce, they opined that in e-commerce, it is not easy to establish trust between partners. Based on the fact that online products and services are not easily verified, trust is considered to be more important in e-commerce than in traditional commerce services (Gefen & Straubb, 2004; Lawrence & Tar, 2010). Lawrence and Tar (2010) opined that “confidence and trust are essential requirements to secure electronic trading” (p. 28). Also, more time should be allocated to promoting confidence in electronic transactions in order to expand the digital economy. They should be assurance that shoppers will receive the goods or services they have placed order for; their personal data are well protected; and they have a secured means of communications (Kirby & Turner, 1993). In addition, this growth has to do with the use of secured and reliable payment method to avoid illegal actions and other fraudulent practices (Mohamad & Ismail, 2009).

### 3. Methodology

In Sudan, an exploratory mixed method design was adopted in two stages, both exploratory and descriptive research approaches. This was done as a result of the absence of empirical studies on B2C e-commerce. The first stage, which was intended for theory generation, adopted an exploratory research design where qualitative data were collected to clarify problems. This stage provides information on the adoption of e-commerce as opined by the enterprise. In addition, it is used to construct a research questionnaire for the following stage. The second stage adopted a descriptive design research for measuring and describing various subject areas. Empirical data in the form of survey research were gathered and used in the second stage to validate and determine the direction of the variable relationships. From previous studies, a theoretical framework was drawn, which will be investigated in the case study organization. Subsequently, the author expects to incorporate the findings from case studies into existing theory.

### 4. Findings and Discussion

The study looked at barriers affecting the adoption of B2C e-commerce by organizations in Sudan. It attempted to analyze the various factors, which that affects B2C e-commerce adoption and implementation. The study findings show failure and delay in the adoption of B2C e-commerce by organizations in Sudan. Despite the evidence of a large growth of the Internet among organizations in the country, very few of them are fully utilizing B2C e-commerce services. In fact, most organizations are at the primary stages of the adoption of e-commerce. A lot of barriers which lead to a slow diffusion of B2C e-commerce among organizations in the country was identified in this study. Thus, it underlies inhibitors such as poor public awareness, epileptic power supply, poor technological infrastructure etc. Due to weak technological infrastructure in the country, the network has a limited coverage, very unreliable, and very slow. In addition, the lack of funds has also led to regular power cuts and it limits the use of technological equipment. Not only that, but also, the embargo of US and the West limit the payment online. Subsequently, poor economy occurs as a result of poor awareness by the public. Further to this, organizations experienced financial challenges for technological initiation. Unawareness was identified as another inhibitor of B2C e-commerce adoption by

organizations in Sudan. In addition, the findings of this research show that both organizations and customers are concerned with the information confidentiality and security online. In conclusion, the government in Sudan and well-meaning organizations plays a vital function in creating an environment that is conducive to the adoption of B2C e-commerce. In addition, technological facilities should be provided by the government. In addition, this would later make the ICT network to be readily available and easily affordable.

**Future work:** Further research needs to be carried out in the areas below:

- In Sudan, e-commerce is in the foundation stage. In addition, this leads to a rapid change in technology and other issues which might not be observed in this study.
- M-commerce has been proposed as a solution for developing countries in adopting e-commerce. A future study could be carried out on M-commerce in African countries in particular, especially after the launch of the African Telecommunication Satellite.

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## The Impact of Mergers and Acquisitions on Financial Performance of Banks in the Kingdom of Bahrain during 2004-15

Bushra A. Abdulwahab, Subhadra Ganguli\*  
Risk Management Department, Al Salam Bank, Bahrain  
College of Business and Finance in Ahlia University, Kingdom of Bahrain  
bushra.abdulwahab@gmail.com,\*sganguli@ahlia.edu.bh

**Abstract:** Following the 2007 global financial crisis, more than 15 M&A transactions took place among financial institutions in the kingdom of Bahrain. This paper evaluates the impact of M&As on the financial performance of four such deals between banks in Bahrain. Data was collected from financial statements of the banks and the Bankscope database during 2004–2015. 15 accounting ratios were applied to CAMEL Rating Model approach. Financial modelling with Excel has been applied to test for the significance of changes in the financial performance of the banks three years before and three years after mergers. No significant difference in the financial performance of the local banks between pre and post M&As in the kingdom of Bahrain was observed. No significant difference in the financial performance of the acquirer bank or the target bank was observed except Bahraini Saudi Bank (target bank) which showed significant improvement in the financial performance after the merger with acquirer bank namely Al Salam Bank. No significant change in the overall CAMEL ratios was observed for all banks involved in the M&As in Bahrain during 2004-15. The study provides an empirical analysis of the M&As before and after the mergers which can serve as a basis for further evaluation of future strategy of the banking sector in the kingdom of Bahrain.

**Keywords:** *Kingdom of Bahrain, mergers and acquisitions, banks, financial performance, CBB*

### 1. Introduction and Literature Review

The aim of this paper is to evaluate the effect of M&As on the financial performance of merged local banks in Bahrain during 2004 -2015 by applying the CAMEL rating model. As per the Central Bank of Bahrain (CBB), 17 M&A transactions took place among financial institutions in the kingdom of Bahrain during 2004-15. The changing dynamics of global markets and progressively increasing competition has resulted in M&As becoming an oft-used route for survival and sustainability. The CBB has supported M&As in the banking sector, especially for those with lower capitalization, since this could potentially result in institutions becoming sustainable in the long run. Additionally, given the relatively small size of Bahrain's financial markets, financial consolidation seemed reasonable during post 2007 financial crisis.

The literature review is divided into two parts- first it considers the effects of M&As on the target and the acquirer banks and secondly it studies the CAMEL model. The definition of a merger has been stated by Botis (2013) as the process of integration between two entities in which one or both will exist legally as one successor entity. Gitman et al. (2012) defined a merger as the combination of two or more firms with the larger of the firms keeping its own identity. On the other hand, Botis (2013) addressed acquisition as a transaction in which the acquiring entity gains ownership and control over the target entity. Gitman et al. (2012) mentioned that an acquiring company is an entity in a merger deal that attempts to acquire another entity, and the target company is the firm that is acquired. Kaur (2014) mentioned that some of the driving factors for M&A include enhancement of market power, lower risk profile, expansion opportunities, replacement of inefficient management, diversification of products and markets and achievement of economies of scope and scale. These are considered as value maximization reasons for merger, while others could be hubris and for managerial purposes. Through M&As, the banking sector aims to reach two main types of synergies: operating synergies (increasing revenue and/or reducing cost), and financial synergies (lowering the cost of capital through consolidation of one or more banks) (Ayadi et al., 2013). Beccalli & Frantz (2013) stated that a bank's decision to initiate an M&A process might be influenced by other external factors like economic environment, laws, and regulations. Central banks around the world have some influence on the integration and restructuring practices of financial institutions.

Many studies on M&A practices in the banking sector have been conducted worldwide. According to Colombo and Turati (2014), banking M&As started during the 1980s in the US followed by Western European

countries in the 1990s. More than 1,500 mergers took place in the US banking sector during the period 1993-96 which was considered the largest such phenomenon during such period (Botis, 2013). Vitale and Laux (2012) analyzed the US banking sector post 2007 that included 105 M&As. The results showed a decline in post-merger profitability. While assets grew marginally, there was little improvement in return and capital adequacy ratios. Knapp & Gart (2014) examined the effect of M&As on the credit risk of banks during 1991 - 2006. The findings showed that the NPL level and the loan charge-offs in the loan portfolio increased significantly during the post-merger period. Ayadi et al. (2013) studied 42 M&A deals in Europe and compared them against 587 non-merging banks. Results showed that consolidated entities enjoyed better management quality in addition to greater economic efficiency and higher productivity gains. Colombo and Turati (2014) considered Italian banking sector during 1995 - 2006 and confirmed that a significant impact on the M&A transaction process depends on the level of social development and regional economy. Based on Rasiah, Ming and Hamid (2014), Central Bank of Malaysia (called Bank Negara Malaysia) supported mergers of banks after the 1997 Asian financial crisis to reach economies of scale and provide higher levels of efficiency. Sufian et al. (2012) analyzed the effect of M&As on the revenue efficiency of 34 commercial banks in Malaysia and showed no significant positive impact on the revenue efficiency of the banks during pre and post-merger periods.

Sinha, Kaushik & Chaudhary (2010) showed that more than 50% of the merged financial institutions (17 across India) improved their financial performance. Further, in the long run, consolidated entities reported higher cash flows, and greater cost savings. Kaur (2014) examined five major mergers during 2001-08 concluding significant gains to target companies while the acquirer received zero or negative gains. Examining the performance of the banking industry in Nigeria during pre and post M&A (1981-2013), Amu & Chigbu (2015) found significant improvement during post-M&A period than before the M&A with regards to the deposit of the private sector and increase in net assets of the banking sector. Moreover, Okpanachi (2011) provided comparative analysis of the impact of M&As on financial efficiency. Michael (2013) stated that shareholders of banks in Nigeria received higher dividends in 2009 post M&A than they received in 2003 prior to the M&A; this concludes that the M&A resulted in better value for the shareholders starting 2005 and during post M&A. Abbas et al. (2015) confirmed that there was no significant improvement in the banks' financial performance during post M&A period. Additionally, decreases in profitability, efficiency, liquidity and leverage ratios were reported. Lee et al. (2013) found that the cost efficiency decreased immediately after M&As of Taiwanese banks; however, it took around three years to regain efficiency.

**CAMEL Model:** Financial performance refers to the bank's ability to generate sustainable profits (Rozzani & Rahman, 2013). The CAMEL model is also used widely among banks in Bahrain to evaluate the quality of any lending or investment. This model was adopted in November 1979 by the Federal Financial Institutions Examination Council (FFIEC), USA for The Uniform Financial Institutions Rating System (UFIRS). The initial rating system evaluated the overall condition and performance of banks by assessing "Capital adequacy, Assets Quality, Management Administration, Earnings Quality and Liquidity Measurement". During January 1997, Federal Reserve introduced a revised rating system (the CAMELS model) which included a sixth component - "Sensitivity to Market Risk" ([www.federalreserve.gov](http://www.federalreserve.gov)). Most related financial ratios of CAMEL stand as mandatory reporting requirements for banks in Bahrain in their financial disclosures to CBB. The various components of CAMEL include C for capital adequacy; A for Assets Quality; M for Management Quality; E for Earnings Quality; and L for Liquidity Position.

The first component of CAMEL is Capital Adequacy ratio. Khatik and Nag (2015) stated that capital adequacy reflects the stability and efficiency of the country's financial system. Boadi, Li & Lartey (2016) mentioned that well capitalized banks have lesser need for external funding. As per the CBB, capital adequacy ratio is measured by a bank's total capital (Tier 1 "core capital" plus Tier 2 "supplementary capital") divided by its total risk-weighted assets. Banks in Bahrain are required to maintain a minimum capital adequacy ratio of 12.5%. Boadi, Li and Lartey (2016), Abdul Rahman and Masngut (2014) and Erol et al. (2014) used the ratio of equity capital to total assets as reported in the bank's balance sheet to evaluate capital adequacy. Banking and Ratio Definitions (2011) defined the ratios of capital adequacy as: Tier 1 capital over risk weighted assets, total capital over risk weighted assets, tangible common equity over risk weighted assets, and shareholders' equity as a percentage of total assets. Disclosure reports contain, in addition to the capital structure and capital adequacy ratio, capital quality of the bank that can be tested through equity to liability

ratio. The second component of CAMEL is Asset Quality. According to Lee et al. (2013), performance of the loans and financing instruments granted by the bank determines the quality of its assets and the degree of its financial strength. Asset quality, as stated by Knapp & Gart (2014), can be measured by determining the proportion of bad loans and facilities in the loan book. The higher the ratio the more problematic the loans (assets) are. Non-performing loan ratio is a mandatory ratio that all banks in Bahrain need to report to CBB. Abdul Rahman & Masngut (2014) used non-performing loans to total asset ratio to compute asset quality. Ferrouhi (2014) evaluated asset quality and Boadi, Li & Lartey (2016) examined total loan to total assets in their study. Furthermore, Mishra & Agarwal (2013) used total investment to total asset ratio.

The third covariate of CAMEL is Management Quality. Boadi, Li & Lartey (2016) considered non-financial parameters such as staff quality, management control system, and organizational discipline to evaluate management quality. Financial parameters were evaluated by Mishra & Agarwal (2013) through profits per employee and return on net worth ratios. Ferrouhi (2014) examined net income to total loans. Moreover, cost to income ratio was considered by Poghosyan & Cihak (2011) and operating expense to total assets ratio was used by Boadi, Li & Lartey (2016). Banking and Ratio Definitions (2011) evaluated efficiency through Operating Expense over Net Revenues ratio.

The fourth component of CAMEL is Earnings Quality. Earnings quality measures the ability to earn regularly and consistently in order to ensure sustainability and stability. Khatik & Nag (2015), Boadi, Li & Lartey (2016) and Ferrouhi (2014) evaluated earnings quality using Return on Average Assets Ratio (ROAA). Rasiah et al. (2014) defined ROAA as the profitability indicator. Besides ROAA, Return On Average Equity ratio (ROAE) is used as another parameter for earnings quality by Abdul Rahman & Masngut (2014) and Poghosyan & Cihak (2011). Rasiah et al. (2014) explained that ROAE indicates benefits that stockholders obtained from investing the required capital. Mishra & Agarwal (2013) used interest income to total income ratio, and non-interest income to total income ratio for studying earnings quality of banks.

The fifth covariate of CAMEL is Liquidity which shows the ability of the bank to meet its financial obligations through liquid assets and short term funds. Previous studies by Khatik & Nag (2015), Mishra & Agarwal (2013), and Poghosyan & Cihak (2011) evaluated the liquidity position by using liquid assets to total assets ratio. Ferrouhi (2014) used deposit to total assets ratio. Abdul Rahman & Masngut (2014) measured net liquid assets over deposits and short term funding. Further, Boadi, Li & Lartey (2016) examined total loans to total customer deposit ratio in order to evaluate liquidity of a bank.

## 2. Methodology

This research analyses the impact of a specific change (M&A) on the financial performance of banks in Bahrain during 2004-15 and is considered a causal study. The research evaluates the performance of commercial banks through testing 15 CAMEL ratios for three years each during the pre and post M&A periods using quantitative methods. The sample of mergers and acquisitions used for the study provides details of each of the M&A deals studied during 2004 -15 and finally t-tests have been applied for testing null hypotheses. Table 1 provides details of each M&A deal studied in the paper and CAMEL ratios used for the study have been highlighted in Table 2. Three years of financial data before the merger and three years after the merger were considered in this study. CAMEL ratios were calculated based on average of three year values prior to M&A deals and average of three year values after the M&A deals as mentioned in Table 1. Financial Modeling in Excel was carried out for all selected ratios in Table 2 using 3 years of pre M&A data and 3 years post M&A data for banks in Bahrain during 2004-2015. Three types of analyses have been used in this paper namely, paired sample t-test for all 15 CAMEL ratios to examine the significant difference between pre and post M&A per deal; t-test (paired sample means) to evaluate the significant difference between the financial ratios in CAMEL during pre and post M&A individually for each ratio reported for all deals and a t-test (paired sample means) to study the significant difference in the overall financial performance between pre and post M&A periods.

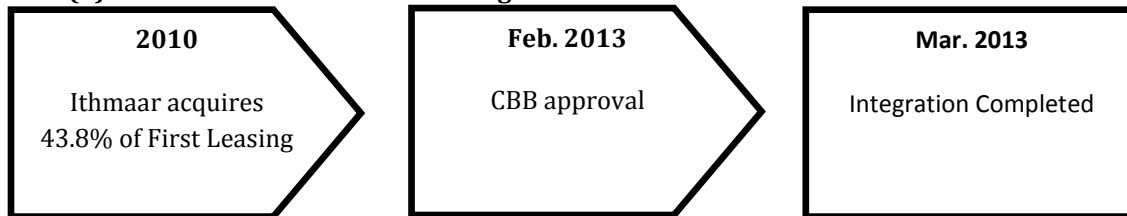
**Sample of the Study:** 17 M&A deals in the financial services sector in Bahrain during 2004-15 show two types of incorporations: local and branch incorporations. Twelve of these M&As took the form of incorporations – branches and local integration – and included conventional banks (retail and wholesale);

Islamic banks (wholesale) and investment banks. This paper focuses on local incorporations which involved 7 mergers (including commercial and investment banks). Four integration deals were selected representing commercial banks which are locally incorporated in Bahrain during 2004 -2015. Table 1 shows the details of the 4 merger deals completed during 2007-13 based on local incorporations. Deals 1, 2 3 and 4 are discussed in detail.

**Table 1: M&A Transactions of Interest**

<b>Bank No.</b>	<b>Merger Completed</b>	<b>Bank/Name</b>	<b>Other Comment</b>
1	Deal 1 (2013)	First Leasing Bank B.S.C. (c)	Due to acquisition of First Leasing Bank B.S.C. (c) by Ithmaar Bank (Islamic Retail) under Ithmaar Bank (Islamic Retail).
2		Ithmaar Bank B.S.C.	
3	Deal 2 (2012)	Bahraini Saudi Bank B.S.C.	Merger between Bahraini Saudi Bank B.S.C. (Islamic Retail Bank) with Al Salam Bank-Bahrain B.S.C. (Islamic Retail Bank) under Al Salam Bank-Bahrain B.S.C. (Islamic Retail Bank).
4		Al Salam Bank	
2	Deal 3 (2010)	Ithmaar Bank B.S.C.	Merger of Shamil Bank of Bahrain B.S.C. (Islamic Retail Bank) with Ithmaar Bank (Conventional Wholesale Bank) under Ithmaar Bank (Islamic Retail Bank).
5		Shamil Bank of Bahrain B.S.C.	
6	Deal 4 (2007)	Al Amin Bank B.S.C.	Merger between Al Amin Bank B.S.C. with Albaraka Islamic Bank (IBL) under the name of Al Baraka Islamic Bank (Retail Bank).
7		Albaraka Islamic Bank B.S.C.	

**Deal (1): Ithmaar Bank with First Leasing Bank - 2013**



Merger of Ithmaar Bank with First Leasing Bank was considered as the latest fully completed integration that took place in Bahrain. First Leasing Bank was a subsidiary of Ithmaar Bank with 44% ownership of total assets and was gradually fully integrated with Ithmaar. In February 2013, the CBB approved transferring the entire business operation from First Leasing Bank to Ithmaar Bank. The share swap was completed by March 2013.

**Deal (2): Al Salam Bank-Bahrain with Bahraini Saudi Bank - 2012**

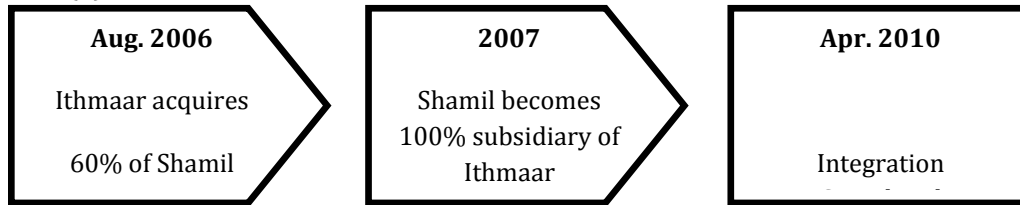


Bahraini Saudi Bank was established in December 1983. In 2009, Al Salam Bank acquired 90% of Bahraini Saudi Bank and the acquisition of 100% stake was completed in August 2012. In February 2012, CBB



approved the conversion of the license of BSB from retail conventional bank into retail Islamic bank and the merger was completed by 24 April 2012.

**Deal (3): Ithmaar Bank with Shamil Bank of Bahrain - 2010**



During August 2006 Ithmaar Bank purchased around 137 million shares (60% ownership) of Shamil Bank Bahrain on the Bahrain Stock Exchange. Shamil Bank became a 100% subsidiary of Ithmaar after the remaining 40% was acquired in 2007. The integration was officially concluded after the CBB approval in April 2010.

**Deal (4): Albaraka Islamic Bank with Al Amin Bank - 2007**



**Table 2: Ratios Selected from the CAMEL Model**

<b>CAMEL Model Attribute</b>	<b>Included Ratio</b>
<b>Capital Adequacy</b>	Capital Adequacy Ratio
	Leverage ratio (E/L)
<b>Assets Quality</b>	NPL ratio
	Loans to Assets ratio
	Net Income to Total Loans
	Cost to Income ratio
<b>Management Quality</b>	Operating Expense to Total Assets
	Operating Expense to Net Interest Income
	Equity to Total Assets
	ROA
<b>Earning Quality</b>	ROE
	Interest Income to Total Income
	Liquidity ratio
<b>Liquidity Position</b>	Deposit to Total Assets
	Loan to Deposit ratio

In 2003, the complete ownership of Al Amin Bank was transferred to Al Baraka Banking Group. Subsequently, Albaraka Islamic Bank (IBL) - another subsidiary of Al Baraka Banking Group - completed the acquisition of its sister bank in Bahrain namely, Al Amin Bank in 2007, under the name of Al Baraka Islamic Bank (Retail Bank). The integration of Albaraka Bank with Al Amin Bank is the oldest M&A deal among the sample deals



selected in the paper. Table 2 provides a list of ratios that have been considered for performance analysis of the banks before and after merger through detailed analysis of past literature.

**Data:** The financial results of the sample M&A deals were collected from secondary sources such as Basel II / III, Pillar III, Public Disclosures as per CBB requirement for banks in Bahrain; annual reports and other published financial statements and Bank scope Database.

The research hypotheses are:

**H0a:** There is no significant difference in the CAMEL variables between pre and post M&A.

**H1a:** There is significant difference in the CAMEL variables between pre and post M&A.

**H0b:** There is no significant difference in the overall financial performance of the acquirer between pre and post M&A periods.

**H1b:** There is a significant difference in the overall financial performance of the acquirer between pre and post M&A periods.

**H0c:** There is no significant difference in the overall financial performance of the target between pre and post M&A periods.

**H1c:** There is a significant difference in the overall financial performance of the target between pre and post M&A periods.

**H0d:** There is no significant difference in the overall financial performance between pre and post M&A periods for all banks in the Kingdom of Bahrain.

**H1d:** There is a significant difference in the overall financial performance between pre and post M&A periods for all banks in the Kingdom of Bahrain.

### 3. Results

#### Camel Analysis for Each Deal-Financial Modelling with Excel

**Deal (1): Ithmaar Bank with First Leasing Bank:** Ithmaar Bank has gone through two M&As during the period 2010 to 2012—first with Shamil Bank in 2010 and then with First Leasing Bank in 2012. First Leasing Bank was established in Bahrain since August 2004 as a closed Bahraini shareholding company. The 2010 integration with Shamil Bank could have had some influence on Ithmaar Bank and may have affected the results in the paper. Considering the ratios examined in this study using CAMEL Model, the paired sample t-test shows insignificant difference between the pre and post M&A Deal (1) for both Ithmaar Bank (acquirer bank) and First Leasing Bank (target bank).

P-value	Acquirer Bank	Target Bank
Ithmaar and First Leasing	0.489449488	0.324747633

Null hypotheses H0b and H0c are accepted for Deal (1). This implies that there was no significant difference between the CAMEL variables during pre and most merger periods for both the target and acquirer bank.

**Deal (2): Al Salam Bank-Bahrain with Bahraini Saudi Bank:** ASBB completed its acquisition of Bahraini Saudi Bank during Aug. 2012. On March 2014, ASBB acquired 100% stake in BMI Bank B.S.C. However, the entire operation of integration (systems and branches) was targeted to be completed by 2017 under the name of ASBB. Hence, this deal was not included in this paper. Integration data pre- merger (2009 - 2011) was analyzed compared to three years of financial ratios post integration data (2012 - 2014). Overall paired sample t-test analysis for Deal (2) showed insignificant difference for ASBB (acquirer bank), while it reported significant difference for BSB (target bank). Test for Deal (2) resulted in significant difference towards positive outcomes for the target bank (BSB).

P-value	Acquirer Bank	Target Bank
ASBB and BSB	0.333236317	0.015260518

Based on the t-test results, null hypothesis H0b is accepted for Deal (2). This implies that there is no significant difference in the financial performance of the acquirer bank during pre and post merger periods.

However, null hypothesis H0c is rejected and alternative hypothesis H1c is accepted due to significant difference observed in the overall financial performance of the target bank (BSB) post M&A. This means that there has been a significant difference in the overall financial performance of the target bank (BSB) in the post merger period compared to the financial performance during the pre-merger period.

**Deal (3): Ithmaar Bank with Shamil Bank of Bahrain:** Overall paired sample t-test analysis for Deal (3) showed insignificant difference between the pre and post M&A for both Ithmaar Bank (acquirer bank) and Shamil Bank Bahrain (target bank).

<b>P-value</b>	<b>Acquirer Bank</b>	<b>Target Bank</b>
Ithmaar and Al Shamil	0.799428475	0.383241072

Hence null hypotheses H0b and H0c are accepted for Deal (3). This implies that like Deal 1, there has been no significant improvement in the overall financial performance of both the target and the acquirer banks in the post merger period compared to the financial performance in the pre-merger period.

**Deal (4): Albaraka Islamic Bank with Al Amin Bank:** The ownership of Al Amin Bank was transferred to Al Baraka Banking Group in 2003; in 2007 the bank was acquired by its sister bank located in Bahrain named Albaraka Islamic Bank, under Al Baraka Banking Group. The financial analysis for the ratios was carried out for three years prior to integration from 2004 to 2006 and three years during post integration from 2007 to 2009. It was challenging to get accurate information from the secondary data sources, especially since Al Amin Bank no longer exists and the annual reports of Al Baraka Islamic Bank were available online from 2007. However, relevant ratios were used after adjustment or substitution with available ones. Capital Adequacy ratio for Al Amin Bank during 2004 to 2006 was not reported in the financial statements or in Bankscope database. Moreover, elements of Tier I and Tier II capital in addition to risk weighted assets were unavailable. Hence, a substitute ratio was used to evaluate the capital adequacy ratio for Al Amin Bank with available data. This ratio was shareholders' equity to total assets (Banking and Ratio Definitions, 2011). Non-performing loans (financing assets) or impaired loans were not reported for 2004 in any of the secondary sources; hence, NPL ratio for this year was not available. Therefore, average NPL ratio of Al Amin Bank for only two years prior to the integration (2005 and 2006) was considered for deal (4) analysis. Al Amin's equity presented a significant portion of the balance sheet, reporting 92.5% of total assets pre M&A; this matter affected capital adequacy ratio, equity to liabilities ratio, and equity to assets ratio. Overall paired sample t-test analysis for Deal (4) for Albaraka Bank and Al Amin Bank for all ratios used in the analysis show insignificant difference between pre and post M&A periods for both banks.

<b>P-value</b>	<b>Acquirer Bank</b>	<b>Target Bank</b>
Albaraka and Al Amin	0.275210455	0.215864611

Hence, null hypotheses H0b and H0c are accepted for Deal (4). This implies that there has been no significant difference in the financial performance of the target and the acquirer banks in the post merger period compared to the financial performance in the pre-merger period.

**T-test: Paired Two Sample T- test for Means:** T-test has been conducted using average of pre and post M&A performance ratios (average three years) in order to evaluate the difference at 5% significance level between pre and post M&A for each ratio for all sample banks. Table 3 showed results of the mean and p-value for each ratio of the CAMEL model parameters. There were insignificant differences between pre and post M&A deals at 5% significance level for all ratios examined in this study. Hence, null hypotheses could not be rejected for the ratios. This test implies that for all banks, there has been no significant difference between the CAMEL ratios in the pre-merger period and the post merger periods. This is similar to the results of evaluation of the mergers and acquisitions of banks in countries such as Pakistan by *Abbas et al. (2015)*, *Sufian et al. (2012)* in Malaysia, *Lee et al. (2013)* in Taiwan and *Vitale and Laux (2012)* in the USA where no significant improvement in the financial performance of firms have been observed after the merger. However, the results of studies in Europe by *Ayadi et al. (2013)* show massive productivity gains by banks in the post

merger period. These results are also contradictory to those of Sinha et al. (2010) where around 50% of the merged banks improved their financial performance after the mergers.

**Table 3: Mean of averages and p-values for each ratio for all banks**

Ratios	Pre M&A	Post M&A	P-value
Capital Adequacy Ratio	<b>0.394</b>	0.174	0.077296567
Leverage ratio (E/L)	<b>11.702</b>	0.178	0.204825754
NPL ratio	<b>0.206</b>	0.126	0.222933187
Loans to Assets ratio	<b>0.485</b>	0.464	0.788281246
Net Income to Total Loans	<b>0.001</b>	-0.007	0.884090235
Cost to Income ratio	<b>0.691</b>	0.816	0.242173789
Operating Expense to Total Assets	<b>0.027</b>	0.022	0.158261966
Operating Expense to Net Interest Income	<b>1.884</b>	1.268	0.283466974
Equity to Total Assets	<b>0.367</b>	0.149	0.107520284
ROA	<b>0.006</b>	-0.003	0.67608475
ROE	<b>0.000</b>	-0.033	0.326569447
Interest Income to Total Income	<b>0.744</b>	0.797	0.424008521
Liquidity ratio	<b>0.246</b>	0.203	0.450148517
Deposit to Total Assets	<b>0.512</b>	0.812	0.05357872
Loan to Deposit ratio	<b>2.025</b>	0.561	0.271126777

**T-Test: Paired Two Sample T-test for Overall Performance:** The overall significant difference between pre and post M&A performance of the banks is tested using a paired sample t-test in which the means of the averages was used for all ratios collectively.

**Table 4: Paired Two Sample T-Test for Mean**

	Average Pre	Average Post
Mean	1.286039626	0.368451457
Variance	8.693388174	0.157557265
Observations	15	15
Pearson Correlation	0.030677676	
Hypothesized Mean Difference	0	
Df	14	
t Stat	1.199409498	
P(T<=t) one-tail	0.125137461	
t Critical one-tail	1.761310115	
P(T<=t) two-tail	0.250274922	
t Critical two-tail	2.144786681	

Table 4 results confirmed insignificant difference between pre and post M&A. Hence, post completion of M&A deals no significant difference in banks' performance in Bahrain was observed. Null hypotheses H<sub>0d</sub> could not be rejected. This implies that there has been no significant difference in the overall financial performance of the banks in the sample between pre and post merger periods in the kingdom of Bahrain. This is similar to the results of Abbas et al. (2015) in the context of the financial performance of the banks in Pakistan where no significant difference was observed in their financial performance between the pre and post merger periods. Table 5 summarizes hypothesis testing of the study.

**Table 5: Summary of Hypotheses Testing**

<b>Hypothesis</b>	<b>Deal No.</b>	<b>Decision</b>
H0a No significant difference in the CAMEL Model elements between pre and post M&A.	All Deals	Accepted
H1a Significant difference in the CAMEL Model elements between pre and post M&A.	All Deals	Rejected
H0b No significant difference in the overall financial performance of the acquirer bank post M&A.	All Deals	Accepted
H1b Significant difference in the overall financial performance of the acquirer bank post M&A.	All Deals	Rejected
H0c No significant difference in the overall financial performance of the target bank post M&A.	Deal (1)	Accepted
	Deal (2)	Rejected
	Deal (3)	Accepted
	Deal (4)	Accepted
H1c Significant difference in the overall financial performance of the target bank post M&A.	Deal (1)	Rejected
	Deal (2)	Accepted
	Deal (3)	Rejected
	Deal (4)	Rejected
H0d No significant difference in the overall financial performance between pre and post M&A of all banks in the Kingdom of Bahrain.	All Deals	Accepted
H1d Significant difference in the overall financial performance between pre and post M&A of all banks in the Kingdom of Bahrain.	All Deals	Rejected

Based on Table 5 it can be concluded that the t-test for the difference between pre and post M&A is insignificant and so the null hypotheses for all M&A deals were accepted except the null hypotheses of H0c for deal 2. This implied that a significant difference was observed in the overall financial performance only for Bahraini Saudi Bank (BSB) between pre and post-merger periods.

**Findings:** The main objective of the paper was to investigate whether M&As between the local banks in Bahrain had any positive impact on the financial performance of the banks before and after mergers which took place during 2004-15. Paired sample t-test for all ratios per deal for acquirer and target bank provided insignificant results for all deals. However, t-test showed significant difference in the financial performance of the target bank in deal (2) only where BSB results have shown positive impact of M&A in the post merger period compared to the pre-merger period. The t-test (paired two sample for means) for the financial ratios during pre and post M&A periods individually for each ratio reported for the four deals together showed insignificant difference in all ratios between the pre and post merger period values. This implied that there have been no significant difference in the financial performance of the target and acquirer banks due to the M&A deals in Bahrain during 2004-15. Finally, paired two sample t-test for means which is t-test for the overall financial performance between pre and post M&A periods resulted in insignificant difference between pre and post M&A values for the local banks engaged in M&A deals in Bahrain. This means that the financial performance of the banks did not improve after the M&A. These results are similar to studies in other geographical areas, namely Pakistan, USA, Malaysia, and Taiwan (Abbas et al., 2015; Vitale & Laux, 2012; Sufian et al., 2012; Lee et al., 2013).

#### **4. Conclusion and Recommendations**

The study has been conducted to explore the efficacy of M&A deals in the banking sector in Bahrain during 2004-15. Four deals namely, between Ithmaar Bank with First Leasing Bank (Deal 1), Al Salam Bank-Bahrain with Bahraini Saudi Bank (Deal 2), Ithmaar Bank with Shamil Bank of Bahrain (Deal 3) and finally Albaraka Islamic Bank with Al Amin Bank (Deal 4) were analyzed and tested in this study. The objective of this study was to determine the impact of M&As on the financial performance of the banks during a period of three years before each merger and a period of three years after each merger. The data used in this study was secondary in nature. The study was conducted to compare selected financial ratios for three years during pre and three years during post M&A periods in which CAMEL rating approach with financial modelling in excel

was followed. Three different tests used in this study namely, paired sample t-test for all ratios to examine the significant difference for pre and post M&A for each deal and for any significant difference in the financial performance of the target and the acquirer banks before and after M&A involved in each deal; t-test (paired two sample test for means) between the financial ratios pre and post M&A individually for each ratio reported for all deals; and t-test (paired two sample t-test for means) for the overall financial performance between pre and post M&A have been reported. The results showed that there were no significant improvements in the financial performance of the target or the acquirer banks after the mergers except in deal 2 where a significant improvement in Bahraini Saudi Bank's financial performance was noticed after merger with Al Salam Bank. The rest of the deals had no significant impact on the overall financial performance of either the target or the acquirer bank in Bahrain involved in mergers and acquisitions during 2004-15. There was no significant difference in the CAMEL model variables before and after mergers for the banks involved in the deals. Finally the paired sample t-test for the overall performance of the banks in the pre and post merger periods showed that there was no significant difference in the overall financial performance of the banks in the sample at 5% level of significance between the pre and post merger periods. Since most of the results showed insignificant impact of M&As on the financial performance of the merged banks, this study calls for a better evaluation of the impact and risks involved in such M&A deals to be assessed before a merger in the future.

The CBB has supported M&As in Bahrain due to the potential financial consolidation of the institutions which, in turn, would help banks overcome difficulties posed by the limited size of the Bahraini market and tougher regulatory and competitive market environment during the post 2007 financial crisis. Review of past literature has shown that the effect of M&As across the globe have also produced very diverse results and no uniform pattern of improvement has been observed in the global markets in terms of success or failure of mergers and acquisitions. More often than not, the *effect of mergers and acquisitions* has produced either little or no positive impact on the target and acquirer companies. Some exceptions to this have been evidenced in studies by Amu & Chigbu (2015), Okpanachi (2011) and Michael (2013) in the case of Nigeria where some remarkable improvements in the performance of the banks during post merger period have been observed. This paper proves that M&A deals in Bahrain during 2005-14 have not produced desirable outcomes, at least during the three years immediately after the mergers. Given such immediate insignificant results of the M&As it is recommended to further assess the impact of M&As over an extended post merger period and also to consider alternative strategies to diversify, strengthen and regulate the financial sector of Bahrain by the CBB. As consolidation of the financial sector is imminent, given the disproportionately large number of financial institutions in an island with 1.3 million *populations*, alternative measures of boosting financial sector should be *sought and* implemented. This seems very important in the face of the continuing oil price slowdown globally and the urgent need for the GCC states (including Bahrain) to diversify their economies further towards alternative avenues to generate a robust private sector and minimise dependence on the hydrocarbons sector.

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