

## Balance scorecard role in competitive advantage of Egyptian banking sector

Ahmed Hamdy

Arab Academy for Science, Technology & Maritime Transport, Egypt

### Keywords

Banking Performance, Competitiveness, Balance Scorecard, Balance Scorecard Orientation, Balance Scorecard perspectives.

### Abstract

*Balance Scorecard (BSC) is realized to be an important tool in creating a competitive advantage nowadays. The current research examines the effect of the bank orientation by balanced Scorecards approach on the banking performance and competitiveness. A sample of 50 banking employees is randomly selected to evaluate the mentioned relation using regression analysis. Results showed that there is a significant impact of Balance Scorecard orientation on both; banking performance and competitiveness.*

### Introduction

The banking sector occupies a significant position in the global economy. The sector has been subject to many external and internal forces in many countries, particularly in Egypt, since the 1990s, when the banking industry undergoes many crises (Hitchins, et al., 2001). Moreover, Egyptian banks are facing many competitive challenges. Competitive pressures on banking sector will remain intense, as new players will try to dominate the most profitable business, while existing ones will try to repackage existing product and services to impose higher prices (Hitchins, et al., 2001).

Through field observations of the banking sector in Egypt, there are three important facts. Firstly, performance measurement in the banking sector in Egypt does not attract many researchers. Secondly, the BSC is an approach that is not known within the banking sector in Egypt, and thirdly, the banks are still using primitive performance evaluation systems such as annual, quarterly and monthly reports. More specifically, we found the public banks depend on financial measures such as: ROI, Liquidity Ratio, Financial Leverage Ratio, Profitability Ratio, Credit Ratio, etc. to judge its performance.

Performance measurement had witnessed continuous development by academicians and practitioners due to the growing criticism of financial measures for being short term oriented, considering past performance, being non consistent with current business's environment, focusing on tangible assets, lacking predictive power, reinforcing functional silos, and being irrelevant for all levels in the organizations (Singh & Kumar, 2007). Thus, researchers have been trying to find efficient and effective approaches to measure performance. At the research level, we did not encounter any research work that deals with the implementation of the BSC to measure the performance of public banks in Egypt, and to establish links between their strategic vision and performance objectives.

So, the research will examine the effect of the bank orientation by balanced Scorecards approach on the performance and competitiveness. So, we need to recognize the effect of the importance of the orientation by balanced Scorecards approach on performance of banks and its impact on competitiveness of the bank.

### Literature Review

#### *Performance measurement*

Performance measurement can be defined as a system by which a company monitors its daily operations and evaluates whether it is attaining its objectives (Lebas, 1995). A series of

indicators that properly reflects company performance should be set up to fully utilize the function of performance measurement. These indicators can be quantifiable or unquantifiable. The selection indicators (criteria) can consist of financial measures (e.g., interest costs, process quality errors, return on average assets) and/or nonfinancial measures (e.g., human resource management, service quality, competitive positioning), depending on which methodology is used.

In the study by Devlin and Gerrard (2005), data were drawn from a questionnaire survey that collected the responses of 495 consumers regarding their financial service relationships. The authors performed a statistical analysis of consumer choice criteria and presented an itemized comparison of the relative importance of the selection criteria for main and secondary banking institutions.

In addition, utilizing the financial ratios of the banking data, Kosmidou et al. (2006) took the PARCLAS approach, a multi-criteria classification methodology. They found that small banks show higher overall performance than large banks. The performance factors including noninterest expenses/average assets, loan loss provisions/net interest, interbank ratio, equity/total assets, and equity/net loans, can help to significantly differentiate small banks from large banks.

Many of these studies have mainly used financial indicators (e.g., bank assets, loan, deposits, liabilities, interest income, and operating costs) to evaluate banking performance (Arshadi, & Lawrence, 1987; Collier, 1995; Giokas, 2008; Kosmidou et al., 2006). A relatively large number of studies, such as Anderson, Cox, and Fulcher (1976), Boyd, Leonard, and White (1994), Chia and Hoon (2000), Devlin (2002), Devlin and Gerrard (2005), Elliot, Shatto, and Singer (1996), Lee and Marlowe (2003), and Martenson (1985), have focused on customers and their choices in the context of banking services (Devlin, & Gerrard, 2005; Lymperopoulos, Chaniotakis, & Soureli, 2006). These studies recommend measuring performance using common performance indicators (e.g., price, speed, accessibility, customer service, location, image and reputation, modern facilities, interest rates, opening hours, incentives offered, product range, and service charge policies) rather than evaluating improvements in the implementation of the bank's strategy.

### ***The Concept of Balanced Scorecard***

According to Kaplan and Norton (1992), the balanced scorecard is a strategic management technique for communicating and evaluating the achievement of the mission and strategy of the organization. Drury (2008) viewed the balance scorecard as a strategy that creates a focus by translating an organization's visions and strategies into operational objectives and performance measures for the discernable perspectives. It could be claimed that balanced scorecard is one of the important measurement techniques because of its ability to incorporate both financial and non-financial variables in measuring organizational performance. The balanced scorecard is divided into four different perspectives which include financial, customer, internal business processes and learning and growth perspectives.

### **Financial Perspective**

According to Al-Najjar and Kalaf (2012), financial measures convey the economic consequences for the actions already taken by the organization, and focus on the profitability related measures on which the shareholders verify the profitability of their investment. Therefore, under this perspective managers are required to generate measures that answer the question: To succeed financially, how should organizations appear to shareholders?

Timely and accurate funding data will always be a priority, and managers will do whatever necessary to provide it. In fact, often there is more than enough handling and processing of financial data (Kaplan and Norton, 1996).

### **Customer Perspective**

According to Kairu et al. (2013), this perspective captures the ability of the organization to provide quality goods and services, the effectiveness of their delivery, and overall customer service and satisfaction. This will result from price, quality, availability, selection, functionality, service,

partnerships and brand value propositions, which will lead to increased customer acquisition and retention (Gekonge, 2005). The BSC demands that managers translate their general mission statement on customer service into specific measures that reflect the factors that really matter to customers (Kaplan & Norton, 1992).

According to Horngren et al. (2012), this perspective helps managers evaluate the question. How do customers see organizations? Customer satisfaction is a top priority for long-term company success. If customers are not happy, they will not come back. Therefore, customer satisfaction is critical to achieving the company's financial goals outlined in the financial perspective of the balanced scorecard. Customers are typically concerned with four specific product or service attributes: Product's price, Product's quality, Service quality at the time of sale, and Product's delivery time (the shorter the better).

### **The Internal Business Process Perspective**

The perspective, according to Gekonge (2005) as quoted by Kairu et al. (2013), "internal processes perspective focuses on the internal business results that lead to financial success and satisfied customers". To meet the organizational objectives and customers' expectations, organizations must identify the key business processes at which they must excel. These key business processes are monitored to ensure that outcomes will always be satisfactory. The internal processes perspective reports on the efficiency of internal processes and procedures. The premise behind this perspective is that customer-based measures are important, but they must be translated into measures of what the organization must do internally to meet its customers' expectations (Kaplan & Norton, 1992). Al-Najjar and Kalaf (2012) were of the view that internal business processes provide the organization with the means by which performance expectations may be accomplished.

### **The Learning and Growth Perspective**

This perspective looks at how an employee of an organization learns and grows in his/her career to improve the performance of the organization. According to Kairu et al. (2013) the learning and growth perspective examines the ability of employees (skills, talents, knowledge and training), the quality of information systems (systems, databases and networks) and the effects of organizational alignment (culture, leadership, alignment and teamwork), in supporting the accomplishment of organizational objectives'.

Processes will only succeed if adequately skilled and motivated employees, supplied with accurate and timely information and led by effective leadership, are driving them. They will lead to production and delivery of quality products and services; and eventually successful financial performance (Gekonge, 2005).

#### *Strength of Balance Scorecard*

There are many benefits derivable from the adoption of balanced scorecard as a performance measurement technique by organizations. The BSC enables the companies to develop a more comprehensive view of their operations and to better match all operating and investment activities to long and short term strategic objectives.

The BSC approach provides a clear prescription as to what companies should measure in order to "balance" the implications in all the functional areas, arising out of the strategic intent. Etim and Agara (2011), states that balanced scorecard as a strategic management system that considers both tangible-financial indices and the intangible-non-financial indices, BSC has been said to be capable of enforcing the achievement of corporate strategies especially as there are causal relationship between the performance of the organization and the effective management of the dynamics of the four perspectives (Kaplan & Norton, 2006).

#### *Weakness of Balanced Scorecard*

Salem (2012) opined that although the successful emergency of BSC and its wide world in many organizations. As other measurement systems, the BSC has attracted criticism from a variety.

Most of these criticisms came from the academic community. This section will explain the most important critical points of the BSC.

The causality relationships between the areas of measurement in the BSC are unidirectional and too simplistic. Some scholars note that there is no cause-and-effect relationship between some of the suggested areas of measurements in the BSC has depended on the relationship between customer loyalty and financial performance as example of these limitations.

The BSC neglects the time dimension. This critical point of the BSC starts from the assumption that the linkage between different points of time must be understood.

The lack of the validation; the reliance of BSC on few measures makes a critical point of BSC.

The lack of the integration between top-levels and operational levels' measures. BSC fails to identify performance measurements as two-ways process. One of the critical points of BSC is its lack of the integration between the top and operational levels which may leads to strategic problematic.

An internally focus. One of the criticisms of BSC is that its framework encourages the focus on internal aspects. The BSC is incapable to answer the questions related to the competitors' movements. Additionally, the BSC does not evaluate the significant changes in external conditions. An ineffective to corporate sustainability. The traditional BSC concept is not effective enough to contribute to corporate sustainability.

### ***BSC in the Banking Sector***

Many academics and executives were attracted by the works of Kaplan and Norton, and have attempted to study the BSC concept and work to perfection it on the theoretical and practical levels. The BSC gradually gained popularity in the USA, Europe, Australia, and Latin America (Janota, 2008). The application of the BSC spread among different business sectors including the banking sector. Tapanya (2004) examined the factors which affect the performance management systems in a highly uncertain and rapidly changing environment through the application of the BSC approach.

Through several consecutive qualitative and quantitative studies in the Thai banking industry post the 1997 financial crisis, the institutional forces play a decisive role in the selection of the performance measurement system regardless of the strategic orientation and/ or the firm's ownership. Pandey (2005) reported the results of a simulated exercise where a group of senior managers (attending an educational program) of a large bank developed a BSC made for their bank. This experiment demonstrated that the achievement of strategic objectives is highly driven by the internal process improvement and that the non-financial variables surpassed the financial variables. Harold (2006) applied the BSC to develop a comprehensive performance measurement and a management tool for the IT in the banking sector in India.

Harold (2006) clarified how a cascade of balanced scoreboards can be useful in the technology effectiveness of commercial banks in India to guarantee better performance management. Huang and Lin (2006) examined the performance system of five commercial banks in China. Through investigations and evaluations of the current performance systems of the sample banks, the authors were able to design a new performance evaluation system based on the BSC. Chwan-Yi and Lin (2009) attempted to develop an integrated framework by merging the concepts of the BSC and the Data Envelopment Analysis (DEA).

Fakhri et al. (2011) attempted to explore the usefulness of a multi-perspective performance measures in the banking sector in Libya. Through an extensive literature review, the authors identified some performance measures and have investigated the impact of five organizational individualities on these measures. Based on a survey in a sample of 55 banks in Libya, the study reported that most banks place their emphasis on financial measures as a first step to evaluate performance, however, many of the banks surveyed tended to implement customer related measures and other non-financial measures such as learning and employee growth.

Yek et al. (2007) studied the use of the BSC as a strategic management system to improve the performance quality of the Vocational Educational and Training (VET) in Singapore. This work attempted to explore and improve the understanding of quality and performance using the BSC approach. The authors claim that the BSC can be adopted as an effective quality and performance management system in a VET institution with appropriate adaptations. Greiling (2010) performed an explorative empirical study on a sample of 20 non-profit organizations in the social services sector in Germany.

The BSC had been found as a successful strategic performance management tool suitable for the banking sector, as banks can benefit from its applications in performance measurement and strategy alignment (Aranda, & Arellano, 2010; Chen et al., 2008; Davis, & Albright, 2004). Therefore, numerous studies (e.g. Aranda, & Arellano, 2010; Chen et al., 2008; Davis, & Albright, 2004; Littler et al., 2000; Meyer, & Markiewicz, 1997; Wu et al., 2009) have employed the BSC structure to focus on performance measurement for banking institutions rather than on creating strategy maps. Indeed, the above studies make no attempt at strategy mapping, which is nevertheless the vital part in constructing a BSC system that can assist management in identifying the causal relationships between performance indicators (Evans, 2007; Goncalves, 2009; Kaplan, & Norton, 2004a). As a result, there is a need not only to produce and properly screen effective criteria consisting of financial and nonfinancial indicators for banking performance measurement but also to build efficient strategy maps that indicate the logical links between performance indicators in evaluating improvements for strategies (Jassbi et al., 2011).

### ***The Concept of Bank's Competitiveness***

The concept of competitiveness has multiple interpretations. Competitiveness depends on different variables, but by summarizing the definitions, the authors came to conclusion that competitiveness is a strategic management comparison tool that shows the existing performance of the bank and further ability to compete in a certain market.

Competitiveness is bank's flexibility and ability to maintain or to improve the position within the changing environment in the particular market. It shows the bank's position in the market, because it is possible to evaluate bank's overall performance and compare it with other players in the local and global market. By competing, the banks use their capabilities, for instance, effective resource management. Usually, (Hamel & Prahalad, 1994), the effective use of resources is based on bank's employees, for example, on their knowledge. In addition, the knowledge is very significant in contributing to bank's intangible assets. The intangible assets are very important in the perspective of private health care bank's competitiveness.

Competition promotes new solutions, values. Every private health care bank is involved in competition environment, some are more, some less, but the approaches that banks use to strive for better results in the market and be more competitive are different. The success base of this is a tailored bank strategy and the balance between the available resources. However, for excellent results banks ought to evaluate also their competitive advantage that increases the bank's possibility to compete in the particular market segment (Porter, 1998)

### ***BSC and Competitiveness***

Creating *competitive advantage* (Swayne, Duncan & Ginter, 2006) "is often a matter of selecting an appropriate basis on which to compete, it is the means by which the organization seeks to develop cost advantage or to differentiate itself from other organizations". According to this definition, it might be focused on image, higher quality services, as well as excellent and widely recognized personnel. Not only strategic manager researchers (Porter, 1998), (Barney, 2007), but as well Latvian authors of strategic management research (Caune, & Dzedons, 2009) point out that competitive advantage is not only a question of internal environment analysis, it needs to be analyzed also in the

context of external environment; it is also necessary to find out the impact of industry on bank's competitive advantage.

In order to create base for competitive advantage, bank can use the concept developed by Jay Barney (2011) Value Based Management, who is considered as the father of modern resource based view. The four empirical indicators of the potential of bank resources to generate sustained competitive advantage are following (Value Based Management, 2011):

$V = \text{Valuable}, R = \text{Rare}, I = \text{Imperfectly Imitable}, N = \text{Non Substitutability}$

The author Phadtare (2011) believes that banks are able to compete on the three primary elements: quality, price, availability. According to this theory, the focus is on how suitable the characteristics of the product or service are how affordable the price is in relation to products or service quality.

As a conclusion, performance management of commercial banks is an important aspect of banking business management. So, this study try to illustrate how to use the Balanced Scorecard as a tool, which is applied to commercial banks performance management system, and points out that it breakthrough the defects in the traditional single application of financial indicators which measures performance. It also raises the value of performance management appraisal system based on the introduction of customer factors, internal business processes, employee learning and growth and financial factors. So this study also tries to study how BSC affected on bank performance and competitiveness.

## Research Methodology

### *Type of Research*

There are many points of views can use to classify this research. According to purpose viewpoint, this research is applied research. Whereas, this research aims to improve understanding the relationship between BSC and bank performance and competitiveness. And the research context is undertaken by people based in variety of setting including banks and the research context is tight time scales. But according to objective view point, this research is explanatory research. Whereas, this research clarify how and why there is a relationship between BSC and Competitiveness. But according to information sought viewpoint, this research is a quantitative research. Whereas this research measure the research variables by using questionnaire designed to according Likert Scale and after collecting empirical data, we will use the suitable statistics methods to find the end results.

This research related to the positivist paradigm because the research tries to confirm about the relationship between BSC and competitiveness in banking sector .and that its properties should be measured through objective methods rather than being inferred subjectively through sensation. There are many elements refer to this research follow the positivism paradigm whereas, the researcher is independent about the research phenomenon and his interests are irrelevant, and the explanation is demonstrate causality, the research progress through hypothesis and deduction, and concepts are operationalized. So that, they can be measured, the units of analysis are reduced to simplest form ,and sampling requires large numbers selected randomly.

Also, we can find this research is followed to a deductive methodology approach. Whereas this research starts with literature about BSC and competitiveness followed by empirical investigation to test an existing theory and verify its validity empirically.

### *Research Hypotheses*

The Research hypotheses could be stated as follow:

H<sub>1</sub>: There is a significant positive relationship between the BSC system orientation and the level of the bank performance.

H<sub>1a</sub>: There is a significant positive relationship between the BSC system orientation and the level of the bank learning and innovation performance.

H<sub>1b</sub>: There is a significant positive relationship between the BSC system orientation and the level of the bank process performance.

H<sub>1c</sub>: There is a significant positive relationship between the BSC system orientation and the level of the bank customer performance.

H<sub>1d</sub>: There is a significant positive relationship between the BSC system orientation and the level of the bank financial.

H<sub>2</sub>: There is a significant positive relationship between the level of the bank performance according BSC system and the bank competitiveness.

H<sub>3</sub>: There is a significant positive relationship between the BSC system orientation and the bank competitiveness.

**Research Question**

Is the BSC system orientation can be contributed to enhance of the bank performance?

If the bank enhances the performance according to BSC system, Can improve the competitiveness of the bank?

What is the current situation about BSC system in the Egyptian bank sector?

What is the obstructs that the bank encounter if the bank try to applied the BSC system?

What are the most success factors that related to apply BSC system in Egyptian bank system?

**Population and Sampling**

There are many decisions in sampling; research population, sample, sample unit, unit of analysis and research limitations. The research population is a set of banks that operating in Egypt, regardless of the field of activity, whether commercial banks or investment banks or specialized banks and also regardless Egyptian banks or foreign banks operating in Egypt.

The sampling frame of this research includes 40 banks operating in Egypt according to the Egyptian Central Bank report in 2015. The sample type for research is simple random sample, a number of randomly selected 50 bank employees to answer on research questionnaire from 3 banks located in Alexandria city in Egypt. The sampling unit is the commercial bank but the unit of analysis is staff of the bank. This research applied on commercial banks branches located in Alexandria Province during year 2015 and not consider Islamic Bank, Industrial bank.

*Research Model*

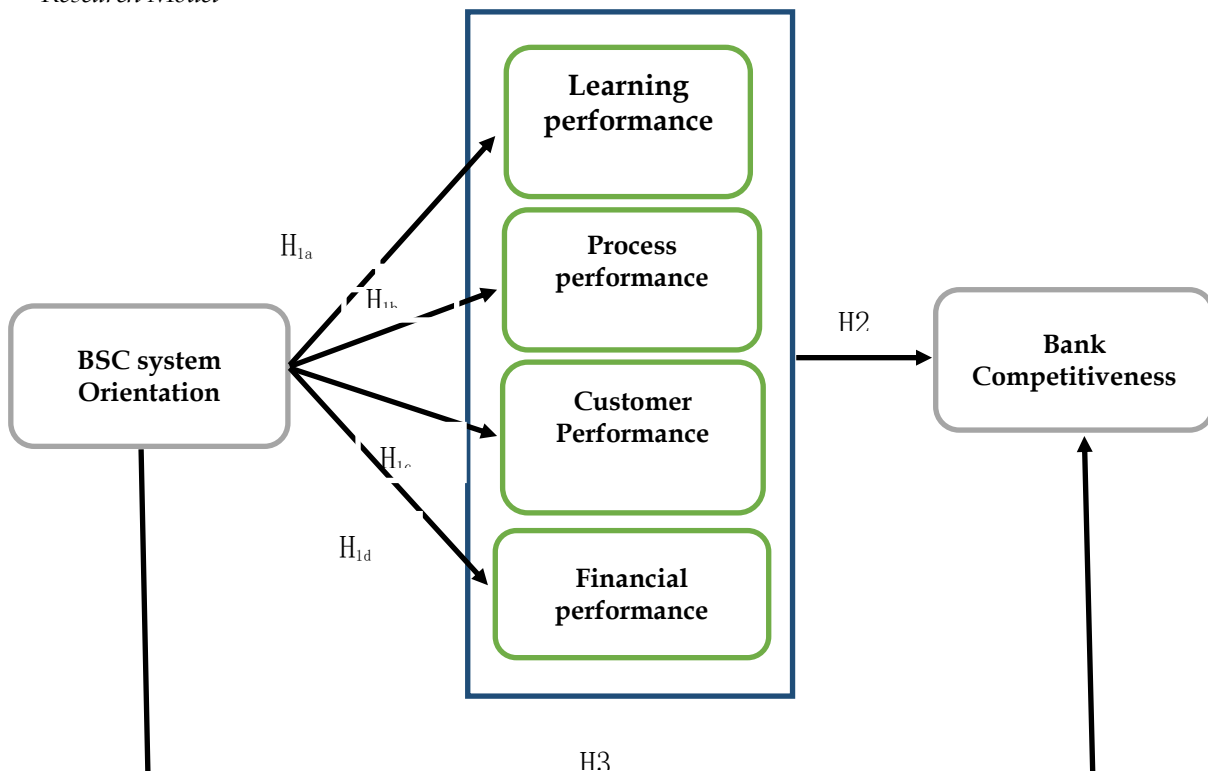


Figure (1): Research Model

**Data Collection Method**

The data collection method of research is survey by using self-administrated questionnaire. We use Likert five categories scale (strongly agree, agree, neither nor disagree, and strongly disagree) to measure employees responses about research variables.

**Data Analysis***Validity and Reliability of Measurements***Reliability**

To estimate the measurements reliability we will find the Cronbach Alfa (Coefficient of Alfa ) by using SPSS version 22 program . If Alpha ( $\alpha$ ) is more than or equal 0.60 for each measurement , then the measurement will be reliable.

**Validity**

It is the extent to which a concept, conclusion or measurement is well-founded and corresponds accurately to the real world. The validity of a measurement tool is considered to be the degree to which the tool measures what it claims to measure.

Statistically by using SPSS version 22, we can measure convergent validity by using factor analysis and find both the total variance explained (VE) and factor loading for each variable. If AVE is more than or equal 0.50 and factor loading for each variable more than or equal 0.60, the measurement of variable will have convergent validity but if the coefficient of relationship between any two variables more than or equal the root square of its correlation variables, the measurements of two variables will have Discriminant validity. The next table illustrates the reliability and validity results.

Table (1): Reliability and Validity results

Variable	Code	Factor Loading	AVE	Cronbach's Alpha
Learning performance	L1	0.87	55.495	68%
	L2	0.75		
	L3	0.64		
	L4	0.72		
	L5	0.82		
Process performance	P1	0.63	60.513	75%
	P2	0.72		
	P3	0.65		
	P4	0.54		
	P5	0.65		
	P6	0.78		
	P7	0.56		
Customer Performance	C1	0.64	59.9	62%
	C2	0.78		
	C3	0.62		
	C4	0.81		
Financial performance	F1	0.73	62.64	85%
	F2	0.62		
	F3	0.56		
	F4	0.54		
	F5	0.87		
	F6	0.53		
BSC system Orientation	O1	0.67	56.43	84%
	O2	0.62		



	O3	0.52		
	O4	0.54		
	O5	0.42		
	CO1	0.72		
	CO2	0.56		
	CO3	0.68		
	CO4	0.56		
Competitiveness	CO5	0.67	54.71	79%
	CO6	0.74		
	CO7	0.75		
	CO8	0.61		
	CO9	0.71		
	CO10	0.56		

According to the results, the measures are reliable because  $\alpha$  is more than 0.60 and also, the measures are valid because the AVE is more than 0.50 and the factor loading is more than 0.6.

#### Hypothesis Test

To test hypothesis, we use simple linear regression (by SPSS version 22) between  $X$  and  $Y$ . If  $R^2$  is significant ( $P$ -value  $<$  or  $=$  0.05 or by using  $F$ -test the calculated  $F >$  tabled  $F$ ), there are effect from (for example, Information technology ( $X$ ) on customer relationships management effectiveness ( $Y$ )).

$R^2$  is a determination factor which the variable  $X$  illustrate the percentage of explanation from variation of variable  $Y$ . and  $R^2$  determine which the Model is valid or not but we use  $T$ -test to determine if the correlation ( $\beta$ ) between  $X$  and  $Y$  is significant or not. Whereas, simple linear regression is the least squares estimator of a linear regression model with a single explanatory variable. In other words, simple linear regression fits a straight line through the set of  $n$  points in such a way that makes the sum of squared residuals of the model (that is, vertical distances between the points of the data set and the fitted line) as small as possible.

We accept the research hypothesis when the model fit indexes ( $R^2$  and  $\beta$ ) is significant ( $p$ -value  $<=$  0.05) but reject accept the research hypothesis when the model fit indexes ( $R^2$  and  $\beta$ ) is significant ( $p$ -value  $>$  0.05)

Table 2 tests the  $H_{1a}$  hypothesis, where it could be accepted. The model  $R^2$  is 0.443. It means that CSFs interprets the 0.443 from the variance of KM effectiveness and  $p$ -value of the model is  $<$  0.05. The Betas  $\beta$  of the BSC orientation is significant.

Table (2): Regression Analysis of the BSC system orientation and the level of the bank learning and innovation performance

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	$R^2$
	B	Std. Error	Beta			
1(Constant)	1.351	.522		2.589	1.351	0.443
BSC Orientation	.661	.129	.665	5.120	.661	

Table 3 tests the  $H_{1b}$  hypothesis, where it could be accepted. The model  $R^2$  is 0.238. It means that the KM effectiveness interprets the 0.238 from the variance of KM effectiveness and  $p$ -value of the model is  $<$  0.05. The Betas  $\beta$  of the BSC orientation is significant.

Table (3): Regression Analysis of the BSC system orientation and the level of the bank process performance

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	$R^2$
	B	Std. Error	Beta			
1(Constant)	2.059	.609		3.378	.002	.238
BSC Orientation	.495	.154	.488	3.214	.003	

Table 4 tests the  $H_{1c}$  hypothesis, where it could be accepted. The model  $R^2$  is 0.088. It means that the KM effectiveness interprets the 0.088 from the variance of KM effectiveness and p-value of the model is  $< 0.05$ . The Betas  $\beta$  of the BSC orientation is significant.

Table (4): Regression Analysis of the BSC system orientation and the level of the bank customer performance

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	$R^2$
	B	Std. Error	Beta	T		
(Constant)	2.435	.882		2.760	.009	.088
BSC Orientation	.396	.222	.296	1.783	.084	

Table 5 tests the  $H_{1d}$  hypothesis, where it could be accepted. The model  $R^2$  is 0.207. It means that the KM effectiveness interprets the 0.207 from the variance of KM effectiveness and P-value of the model is  $< 0.05$ . The Betas  $\beta$  of the BSC orientation is significant.

Table (5): Regression Analysis of the BSC system orientation and the level of the bank financial

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	$R^2$
	B	Std. Error	Beta	T		
(Constant)	2.503	.516		4.850	.000	.207
BSC Orientation	.407	.138	.455	2.937	.006	

Table 6 tests the  $H_2$  hypothesis, where it could be accepted. The model  $R^2$  is 0.365. It means that BSC performance interprets the 0.365 from the variance of competitiveness and p-value of the model is  $< 0.05$ . The Betas  $\beta$  of the CSFs is significant.

Table (6): Regression Analysis of the level of the bank performance according BSC system and the Bank competitiveness

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	$R^2$
	B	Std. Error	Beta	T		
(Constant)	1.051	1.589		2.662	0.041	.365
Learning	.103	.372	.062	3.277	0.001	
Process	.311	.383	.182	2.813	0.031	
Customer	-.085	.469	-.038	1.182	0.021	
Financial	.483	.325	.321	2.485	0.038	

Table 7 tests the  $H_3$  hypothesis, where it could be accepted. The model  $R^2$  is 0.420. It means the BSC orientation interprets the 0.420 from the variance of competitiveness and p-value of the model is  $< 0.05$ . The Betas  $\beta$  of the CSFs is significant.

Table (7): Regression Analysis of the BSC system orientation and the level of the bank financial

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	$R^2$
	B	Std. Error	Beta	T		
(Constant)	3.287	.417		7.878	.000	.420
X5	.173	.099	.291	1.747	.090	

### Descriptive Statistic

Descriptive statistic is the discipline of quantitatively describing the main features of a collection of information, or the quantitative description itself. Sample units are 20 male and 15

female, the most of employees have higher studies qualifications. The most of employees are working at operational level. The average of numbers of working years in the bank is 8.5 years.

### Conclusion and Recommendation

According to the research results we can conclude the following; there is a significant positive relationship between the oriented by BSC system and the level of the bank performance. Especially, there is a significant positive relationship between the oriented by BSC system and the level of the bank learning and innovation performance. There is a significant positive relationship between the oriented by BSC system and the level of the bank process performance. There is a significant positive relationship between the oriented by BSC system and the level of the bank customer performance. There is a significant positive relationship between the oriented by BSC system and the level of the bank financial

There is a significant positive relationship between the level of the bank performance according BSC system and the Bank competitiveness. There is a significant positive relationship between the BSC system orientation and the Bank competitiveness.

The decision makers in Egyptian bank sector must be oriented by BSC system to improve the effectiveness of the bank performance and competitiveness.

### References

- Ahmad, Z., Ahmad, Z., Ahmad, I., & Nawas, M. (2010). Balanced Scorecard: Is it a Spontaneous Performance Measurement Tool? *Interdisciplinary Journal of Contemporary Research in Business*, 2(2), 100-107.
- Ahmed, Z., Bowra, Z., Ahmad, I., Nawaz, M., & Khan, M. (2011). Performance Measures Used by the Commercial Banks in Pakistan within the Four Perspectives of Balanced Scorecard. *Journal of Money, Investment and Banking*, (21),12-20.
- Al Sawalqa, F., Holloway, D., & Alam, M. (2011). Balanced Scorecard Implementation in Jordan: An Initial Analysis. *International Journal of Electronic Business Management*, 3(9), 196-210.
- Chwan-Yi, C., & Lin, B. (2009). An Integration of Balanced Scorecards and Data Envelopment Analysis for Firm's Benchmarking Management. *Total Quality Management*, 11(20), 1153-1172.
- Evans, N. (2005). Assessing the Balanced Scorecard as a Management Tool for Hotels. *International Journal of Contemporary Hospitality Management*, 5(17), 376-390.
- Fakhri, G., Menacere, K., & Pegum, R. (2011). Organizational Specificities that affect the Use of Corporate Performance Measurements Process in the Banking Sector. *Journal of Performance Management*. 3(23), 5-23.
- Greiling, D. (2010). Balanced Scorecard Implementation in German non-profit Organizations. *International Journal of Productivity and Performance Management*, 6(59), 534-554.
- Kaplan, R. S., & Norton, D. P. (2000). *The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment*. Boston: Harvard Business School Press.
- Kaplan, R.S., & Norton, D. P. (1992). The balanced scorecard-Measures That Drive Performance. *Harvard Business Review*, 1(70), 71-79.
- Kollberg, B., & Elg, M. (2010). The Practice of the Balanced Scorecard in Health Care Services. *International Journal of Productivity and Performance Management*, 5(60), 427-445.
- Tapanya, S. (2004). Examining the Factors which Influence Performance Measurement Management in the Thai Banking Industry: An Application of the Balanced Scorecard Framework. PhD. Thesis, Murdoch University.
- Yek, T. M., Penney, D., & Seow, A. (2007). Using Balanced Scorecard (BSC) to Improve Quality and Performance of Vocational Education and Training (VET): A Case Study in Singapore. AARE 2007 Conference, November 25 - 29:Fremantle, Australia.
- Zhang, Y., & Li, L. (2009). Study on Balanced Scorecard of Commercial Bank in Performance Management System. Proceedings of the 2009 International Symposium on Web Information Systems and Applications (WISA'09) Nanchang, P. R. China, May 22-24, 206-209.