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EVALUATION OF BANK'S PERFORMANCE BY USING BALANCED SCORE CARD: PRACTICAL STUDY IN LIBYAN ENVIRONMENT

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Abstract:

The purpose of this study is to contribute to the understanding of how BSC is developed and applied in evaluating the performance of The Jumhouria Bank (JB) in Libya. Using the concepts of Kaplan and Norton, and the data made available from the bank, a BSC was derived to measure the performance of the bank between 2007-2010. The analysis assisted the cause-effect relationships between the non-financial, and the financial dimensions of the BSC. Due to lack of research work, in this area, in the banking sector in Libya, this study shall contribute to the knowledge on how banks in Libya may apply the BSC to evaluate their performance, and how they might turn strategic vision into potential performance. The author proposed some future research needs required in this area. The use of the BSC developed here is limited to the bank studied; however, the approach could trigger off reflections among policy makers and other banks to start using the BSC.

Keywords:

Performance evaluation, management control, balanced scorecard

JEL Classification: M49

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1. Introduction

In the past few decades, performance measurement has become a hot topic, and has witnessed continuous development and modifications by academicians and practitioners. The interest in this topic is triggered by the growing criticism of financial measures use in the performance management systems, therefore, researchers have been trying to arrive at efficient and effective approaches to measure performance. Financial measures of performance were criticized by many authors (Singh & Kumar, 2007) 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 .Through field observations and interviews with directors in the banking sector in Libya, the researcher arrived at three important facts. Firstly, performance measurement in the banking sector in Libya does not attract many researchers, secondly, the BSC is an approach that is not known within the banking sector in Libya, and thirdly, the banks are still using primitive performance evaluation systems such as annual, quarterly and monthly reports. More specifically ,the researcher found that the Jumhouria Bank (JB) with over 130 branches throughout Libya depends on financial measures such as: ROI, Liquidity Ratio, Financial Leverage Ratio, Profitability Ratio, Credit Ratio, etc. to judge its 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 banks in Libya, and to establish links between their strategic vision and performance objectives

The author believe that with the openness of Libya to the world and foreign investors after 2000, the banking sector should start adopting holistic performance measurement systems such as the BSC to demonstrate to stakeholders that this sector is turning to exploit financial and non-financial measures to provide investors with performance information .

Therefore, a research work of this type is significant and worthy of investigation within the context of the banking sector in Libya. We expect that this work shall increase our understanding in this topic, bridge the gap of knowledge in this area ,and attract the attention of the authorities in the Central Bank of Libya to consider the use of the BSC as a measurement and strategic performance tool in the banking sector in Libya .

6. Literature Review

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 .

Ahmed et al. (2011) conducted a study in which they surveyed a sample of 27 banks in Pakistan to identify the measures that are used by the sample banks to evaluate their

performance according to the four perspectives of the BSC. The authors reported that all the banks surveyed used measures that correspond to the BSC approach to evaluate their performance, however, the significance of the measures varied among the sample studied.

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.

Zhang and Li (2009) believe that performance management is an important aspect of banking business management. In their study they proposed the BSC as a tool to improve the performance of commercial banks in China. The authors proposed a mechanism and a strategy for application along with the limitations of the BSC.

Zaman (2004) investigated the current state of BSC use in Australian corporations. The author surveyed the top 50 Australian companies. The survey results revealed that only %33of companies use the BSC and that 25% are planning to implement it in the future. The author argues that Australian companies are at the edge of adopting a strategic posture or intention to implement the BSC in the near future .

Al Sawalqa et al. (2011) analyzed the implementation state of the balanced scorecard among industrial companies in Jordan. The authors surveyed 168 companies to obtain an insight on the level of BSC implementation. The study showed that 35.1% of the surveyed companies applied BSC, while 30% were considering or implementing the BSC approach.

Kollberg and Elg (2010), attempted to identify the major characteristics of the BSC application in health care organizations in Sweden. The authors used a case study approach where they focused on different managerial levels in a hierarchical branch in three health care organizations that used the BSC. The analysis revealed that the BSC is used as a tool for enhancing internal capabilities and organizational development. More specifically, the authors reported that management and employees used the BSC as a tool in discussions, information diffusion, and knowledge creation .Although not exhaustive, the above literature review demonstrates that the BSC approach had its chance of widespread applications in different countries and business sectors .

2. The Research Problem

The literature presents a strong interest on evaluating banks' performance by the BSC approach. However, the BSC, as a performance evaluation tool, did not find its way to the Libya business sector in general and to the banking sector, in specific. The authors did not encounter any research work mainstreamed to the BSC application in the banking sector in Libya. In addition, the performance measurement used in the JB is still based on financial measures, and monthly or annual reports. Although the JB administration is not aware of it, the dependence on financial measures is misleading because it does not provide a holistic view about how the bank is doing on the internal

processes, customer, and learning and growth perspectives. Therefore this study shall address the problem of developing a BSC model to measure (for the first time) the performance of the JB. The performance results can benefit the bank studied, the stakeholders, and the financial sector analysts .

3. The Research Aims

This research work aims to :

- 1- contribute to the BSC literature ,
- 2- encourage further research on BSC in Libya ,
- 3- address the limitations of the present performance measurement applied in the Libyan Banks
- 4- increase our understanding about how the BSC may be developed and applied within the context of the banking sector in Libya
- 5- bridging the gap of knowledge on this subject in the banking sector in Libya

4. The Research Methodology

In this research the authors followed a case study approach. Relevant data were made available by the bank studied for four years (2007-2010). Data were collected directly from the bank's financial statements, monthly, quarterly, and annual reports. For confidentiality purposes the name of the bank is referred to by JB, the years were altered, and no data from the bank's financial statements shall be declared here .

5. Strategy Implementation, Performance, and BSC

To achieve a competitive edge, and to retain customers; organizations should be innovative to fulfill the ever changing needs of their customers. Being innovative leads to customers' satisfaction which in turn strengthens the financial position of the organization (Ahmad et. al., 2010). Therefore, organizations should develop sound strategies to maintain strong financial positions. Evans (2005) mentioned that strategies may be very well drawn and presented, but the problem is that strategy is not very well communicated to people involved in the execution process. Charan & Colvin (1999) pointed that although strategy execution is everyone's business in the organization, the final result is poor strategy execution in many organizations. Top management formulates strategy, but the execution is a bottom up process .According to Anand (2004) four barriers are responsible for strategy implementation :

- 1- Vision Barrier: Few people in the organization understand the strategy of their organization .
- 2- People Barrier: The objectives of most workers are not linked to the organization's strategy .
- 3- Resource Barrier: Misallocation of time, energy, and money to processes that are critical to the organization .
- 4- Management Barrier: Management allocates little time to strategy, and much time to short-term tactical decision-making .

Kaplan and Norton (2000) argued that most companies fail to execute strategies, and that :

- Only 5% of the workforce understands their company's strategy .
- Only 25% of managers have incentives linked to strategy .
- 60% of organizations don't link budgets to strategy .
- 86% of executive teams spend less than one hour per month discussing strategy .

With respect to performance measurement, the literature indicates that most operational and control systems are designed around financial measures and targets. Namazi & Abhari (2010) mention that prior to 1980's, organizations used financial measures (ROI, net profit, return on equity etc.) to evaluate their performance, however it is very well known that financial measures are good, only, in the short term .The emphasis placed by most companies on financial measures creates a gap between strategy development and implementation. Therefore, it is imperative to communicate the strategy to everyone in the organization in an understandable language. If strategy is well expressed in terms of measurements and targets, then employees will understand their roles and what is expected from them. This will finally lead to better strategy execution and enhanced performance (Kaplan & Norton, 1996) .

The issues of poor strategic implementation, and the reliance on financial measures only to judge the strategic performance of the organization motivated Kaplan and Norton (1992) to propose the BSC (in a series of articles) as a tool to link performance measures by looking at the business's strategic vision from four different perspectives: Financial ,Customer, Internal Processes, and Learning and Growth. The BSC is intended to document a strategic logic in terms of cause and effect relationships between the current activities of an organization and its long-term success .The following is a description of the BSC perspectives based on Kaplan and Norton (1992, 1996):

Financial Perspective: 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 following question: "To succeed financially, how should we appear to our shareholders?" Kaplan and Norton acknowledge the need for traditional financial data. The accurate and timely financial data are necessary for the efficient and smooth direction of the organization. The provision of the right and timely financial data to the right person in the organization helps much in the process of making the right decision in the right moment. Under this perspective the most common performance measures incorporated are: ROI, Cash Flow, Net Operating Income, Revenue Growth, etc .

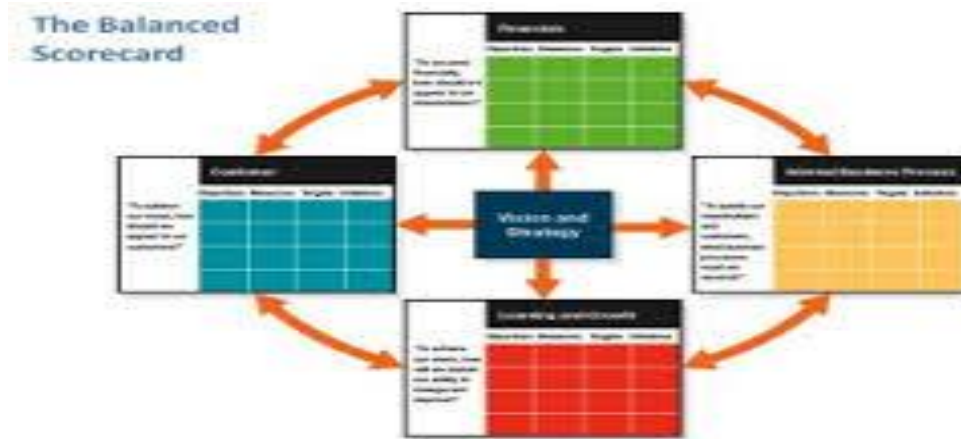
Customer Perspective: This perspective provides a view on how customers perceive the organization. The customer perspective should be considered the central element of any business strategy that provide the unique mix of products ,price, relationship, and

image that the company offers to its customers. In this perspective the organization should demonstrate how it differentiates itself from the competitors by retaining, attracting, and sustaining relationships with its targeted customers. Therefore, managers are required to generate measures to answer the following question: "To achieve our vision, how should we appear to our customers?" Typical measures used under this perspective are :customer satisfaction, customer complaints, customer lost/won, sales from new product, etc .

Internal Business Processes Perspective: Internal business processes provide the organization with the means by which performance expectations may be accomplished. This perspective refers to the internal business processes of the organization and, therefore, managers are required to provide measures that answer the following question: "To satisfy our customers and shareholders, what business processes must we excel at?" The central theme of this perspective is the results of the internal business processes which lead to financial success and satisfied customers. Typically the measures of this perspective are based on producing goods and services in the most efficient and effective methods. Commonly used measures for this perspective are: cost of quality, cost of non-conformance, process innovation, time savings etc .

Learning and Growth Perspective: Under this perspective managers must identify measures to answer the following question: "To achieve our vision, how will we sustain our ability to change and improve?" Actually, this perspective is related to the employees of the organization, and it measures the extent to which the organization exerts efforts to provide its employees with opportunities to grow and learn in their domain. Kaplan and Norton acknowledge that the learning and growth measures are the most difficult to select; therefore they suggest the following measures as examples :employee empowerment, employee motivation, employee capabilities, and information systems capabilities .The early BSC model, we described above, consisted of simple tables including four parts, each part is referred to as a perspective or a dimension. These perspectives are supposed to create a balance between short-term and long-term objectives. Newing (1995) stated that by combining measuring and thinking by the four perspectives managers can prevent making improvements in one area at the expense of another area. According to the author, the BSC forces managers to focus on non-financial measures which impact on the long-term profitability of the organization.

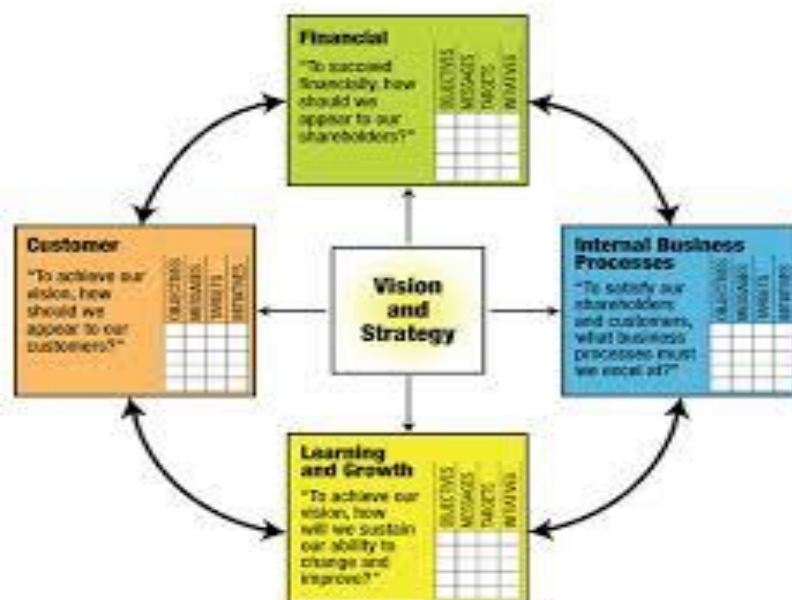
Kaplan and Norton (1992) acknowledged that the format of the BSC depends on the needs of the organization .In the original version of the BSC model (Figure 1),



Source : Kaplan and Norton, 1996.

goals and measures were the only two parameters used by the scorecard (Scherer, 2002). The major issue facing an organization in developing a BSC of this type is how to choose the measures that are explicitly linked to its strategy? The underlying assumption here is that strategy is widely communicated and accepted organization wide. Another important problem in this model is how to choose the correct measures? If managers believe that the chosen measures are not well, then they will not have confidence in the information that these measures supply .

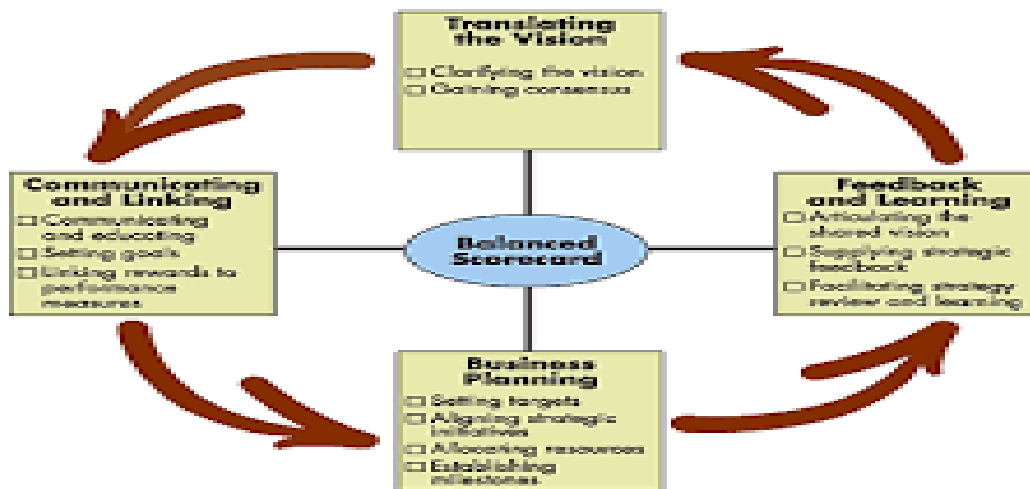
In the mid of the 1990s, Kaplan and Norton (1996) promoted a new version of the BSC to alleviate the problems of the early model. This version, presented in Figure 2.



Source : Kaplan and Norton, 1996.

Each perspective, now, consists of four parameters: goals, objectives, targets, and initiatives. It, also, depends on four processes that bind short-term activities to long-term objectives (Figure 3).

Managing Strategy: Four Processes



Source : Kaplan and Norton, 1996.

In this new model, the selection of the measures is done on the basis of a set of "strategic objectives" plotted on a "strategic linkage model" or "strategy map". The strategic objectives are spread among the four perspectives: Financial, Customer, Internal Processes, and Learning and Growth. However, the design of the BSC becomes less abstract. Within each perspective, managers are supposed to identify five or six goals. By plotting causal links, managers can delineate the links between these goals. When a reasonable agreement is achieved on the objectives, and how they inter-link, then a BSC can be devised by identifying suitable measures for each objective. This methodology provides managers with greater contextual justification for choosing the measures within each perspective, and is easier for them to work with.

Kaplan and Norton (1996) argue that this version could be used as a strategic management system which supports the aforementioned perspectives. The elements of this strategic management system are: Translating the Vision, Communicating and Linking, Business Planning, and Feedback and Learning.

- **Translating the Vision:** Kaplan and Norton suggest that lofty statements such as "becoming the number one supplier" are difficult to translate into operational measures that bear meaning to all the people in the organization. However, by relying on measurement, the scorecard shall force management to arrive at an agreement on the metrics they will use to operationalize their vision.
- **Communicating and Linking:** The implementation of strategy starts with communicating it up and down the organizational chart and educating personnel who will execute the strategy. By passing strategy across the organization, objectives and measures can be translated into objectives and measures pertaining to particular groups. Relating these targets to individual's performance, a "personal scorecard" is achieved, in this way employees can understand how their performance can support the organizational strategy.

- **Business Planning:** Kaplan and Norton indicate that most organizations have separate units for strategic planning and budgeting. However, in practice these two functions rarely coincide on achieving the organization's strategy. The idea of creating a balanced scorecard obliges companies to integrate these two functions to ensure that budgets do indeed support strategic goals. By arriving at an agreement on the performance measures for the four perspectives, the company can identify the most influential drivers of the outcomes desired, and then setting milestones to measure the progress achieved with these drivers .
- **Feedback and Learning:** The existing feedback and review processes of a company focus on whether the budgeted financial goals of the company, or its units, or its employees have been met. Using the balanced scorecard as a management system, the company can monitor and control the short-term results from the other three perspectives :customers, internal business processes, and learning and growth. Thus, the company can review and evaluate its strategy according to recent performance. The scorecard, therefore, aids the company in modifying its strategies to reflect real-time learning .According to Ashton (1998) the BSC can be used as :
 - 1- A framework for implementing corporate strategy .
 - 2- A tool for linking business, team and individual objectives and rewards to strategic goals .
 - 3- An effective tool for implementation of change management .
 - 4- A good match with the organization's deviation from a command and control culture to empowerment and coaching culture .
 - 5- A way to understand the drivers of business success .
 - 6- An identifier of "cause-and-effect" relationships across operations .
 - 7- A dynamic communication and a feedback tool .

As many organizations started to depend on intangible assets to measure performance, the scorecards are becoming a useful approach for performance evaluation (Kaplan & Norton, 1993). Silk (1998) highlighted that a US survey found that 60% of Fortune 1000 firms have implemented the BSC. Since 1996, the interest in BSC has grown tremendously among academicians and practitioners, and its implementation impressed many organizations around the world (Zaman ,2004 As cited by Singh & Kumar, 2007), there is great evidence which supports the application of the BSC in different business sectors such as: FHC Corporation, Apple Computer Company, Advanced Micro Devices, DHC Chemical Division, Nat west Bank, Chemical Bank, Mobil's US Marketing and Refining Division, and Rock water Engineering. We believe that this area is fertile and shall continue to attract practitioners, researchers, and academicians in the future .

7. Data Analysis and BSC Development

The following steps were used to develop the BSC for the JB :

First: Using the concept of the strategic map, the authors worked with the bank's administrators to develop a cause-effect relationship to link the bank's objectives to its

strategic goals in an effort to select the measures pertaining to each of the four BSC perspectives. Five measures for each perspective were chosen as follows :

Financial perspective: Liquidity Ratio, Return on Investment, Return on Equity, Profit Margin, and Leverage Ratio .

Internal Processes Perspective: Productivity Growth, Growth of Banking Services, Credit Growth, Growth in Software Applications, and Front Office Employees .

Customer Perspective: Customer Satisfaction, Customers' Growth, Growth of Current Accounts, Growth of Saving Accounts, and Growth of Safety Deposits .

Learning and Growth: Employee Productivity, Employee Turnover Rate, Growth of the Bank's Branches, Employee Participation in Development Programs, and the Number of Employees Using IT in their work .

Second: Using the data available about the JB performance from 2007-2010, the author and the JB administration were able to identify the BSC's objectives, measures, and targets for the four perspectives as they appear in Table (1) .

Table 1: Balanced scorecard objectives , measures and targets

	Objectives	Measures	Target
Financial	<ul style="list-style-type: none"> ▪ Survival ▪ Growth ▪ Stakeholder Satisfaction ▪ Revenue 	<ul style="list-style-type: none"> ▪ Liquidity Ratio ▪ ROI ▪ ROE ▪ Profit Margin ▪ Leverage Ratio 	<ul style="list-style-type: none"> ▪ 20% ▪ 25% ▪ 200% ▪ 100,000,000 ▪ 100% - 250%
Internal Processes	<ul style="list-style-type: none"> ▪ Increase Innovations ▪ Improve Operational Capabilities ▪ Improve Operational Efficiency 	<ul style="list-style-type: none"> ▪ Productivity Growth ▪ Growth of Banking Services ▪ Credit Growth ▪ Growth in Software Application ▪ Front Office Employees 	<ul style="list-style-type: none"> ▪ 100% ▪ 30% ▪ 300% ▪ 50% ▪ 5%
Customer	<ul style="list-style-type: none"> ▪ Customer Retention ▪ Attract New Customers ▪ Increase Market Share 	<ul style="list-style-type: none"> ▪ Customer Satisfaction ▪ Customers Growth ▪ Growth of Current Accounts ▪ Growth of Saving Accounts ▪ Growth of Safety Deposits 	<ul style="list-style-type: none"> ▪ 2% ▪ 150% ▪ 200% ▪ 70% ▪ 125%
Learning and Growth	<ul style="list-style-type: none"> ▪ Improve Employees Capabilities ▪ Improve Employee Satisfaction ▪ Improve Computerised System Application 	<ul style="list-style-type: none"> ▪ Employee Productivity ▪ Employee Turnover ▪ Growth of the Banks Branches ▪ Employee Participation in Development Programs ▪ Number of Employees Using IT in their work 	<ul style="list-style-type: none"> ▪ 1000 – 3500 ▪ 1% - 5% ▪ 100% ▪ 30 – 70 programs ▪ 400 – 1400 Employees

Third: A performance scale was identified for each measure, and 50 score points were divided on the elements of each scale. The total scores in the BSC developed are

therefore 1000 (20 measures x 50 points, or 250 points/perspective .(Table (2) presents the measures, the scales and the scores breakdown for each measure within perspectives .

Table 2: Balanced scorecard of the JB.

	Measures	Scores					Score Assignment			
		10	20	30	40	50	2007	2008	2009	2010
Financial	Scale									
	Liquidity Ratio	1-6%	7-12%	13-18%	19-24%	25-30%	50	50	50	50
	ROI	1-3%	4-8%	7-9%	10-12%	13-15%	10	10	10	50
	ROE	1-80%	81-160%	161-240%	241-320%	321-400%	10	20	50	50
	Profit Margin	1-40m	41-80m	81-120m	121-160m	161-200m	10	10	50	50
	Leverage Ratio	100-130%	131-160%	161-190%	191-220%	221-250%	20	20	50	50
	Perspective Subtotal / year						100	110	200	250
Internal Processes	Productivity Growth	1-25%	26- 50%	51- 75%	76-100%	101- 125%	0	20	50	20
	Growth of Banking services	1-4%	5-8%	9-12%	13-16%	17-20%	50	40	0	0
	Credit Growth	1-80%	81-160%	161-240%	241-320%	321-400%	0	50	0	50
	Growth in software applications	1-14%	15-28%	29-42%	43-56%	57-70%	50	20	0	10
	Front office employee	0.1-0.6%	0.7-1.2%	1.3-1.8%	1.9-2.3%	2.4-3%	50	20	10	20
	Perspective Subtotal / year						150	150	60	100
Customer	Customer satisfaction	0.1- 0.3 %	0.4- 0.6%	0.7-0.9%	1-1.2%	1.3-1.5%	50	20	30	30
	Customer Growth	1-20%	21-40%	41-60%	61-80%	81-100%	0	0	0	0
	Growth of current accounts	1-35%	36-71%	72-108%	109-143%	144-180%	50	10	20	10
	Growth of saving accounts	1-10%	11-20%	21-30%	31-40%	41-50%	10	30	10	50
	Growth of safety deposits	1-20%	21-40%	41-60%	61-80%	81-100%	0	0	50	20
	Perspective subtotal / year						110	60	110	110
Learning & Growth	Employee productivity	10000-15000 DL	15001-20000 DL	20001-25000 DL	25001-30000 DL	30001-35000 DL	10	30	10	20
	Employee turnover	0.1- 1 %	1-1.2%	2.1-3%	3.1-4%	4.1-5%	40	30	30	30
	Growth of the bank's branches	0.1-2%	2.1-4%	4.1-6%	6.1-8%	8.1-10%	0	0	0	0
	Employee participation in development programs	41-48	49-56	57-64	65-72	73-80	50	30	10	20
	Number of employee using IT in their work	400-600	601-800	801-1000	1001-1200	1201- 1400	10	20	50	50
	Perspective subtotal / year						110	110	100	120
Total scores on four perspectives						470	430	470	580	

Fourth: The JB bank performance is measured for the four years of study according to the scales and scores developed in step 3. The last four columns of Table (2) present the scores assigned to each measure from 2007-2010. Table (2) also shows the perspective subtotal/year, while the last row of the table presents the total score/year for all the perspectives.

8. Findings

The analysis reveals that the JB performance measured by the BSC was 470, 430, 470, and 580 for the years 2007- 2010 respectively. Converting these scores on a 100% scale yields: 47%, 43%, 47%, and 58% for the same years .

It seems evident that the JB performance was weak during the first three years of study, and fair during 2007. In general the annual average score achieved by the bank was 488 which indicates a weak performance. With respect to performance on individual perspectives, we observe from Table (2) that the scores achieved on the financial perspective improved steadily from 2007-2010 with an average annual growth rate of approximately 40%. This finding coincides with the bank's concentration on the financial performance as a measure of performance. The internal processes perspective does not reveal significant improvements; the average annual growth rate was about 2%. In fact the JB performance was hurt severely on this perspective. We notice that the growth of banking services, the credit growth, and the growth on software applications measures scored zero during the third year. The JB scores on the customer perspective were the worst. The average annual growth rate was 0% during the years of study. The customers' growth measure scored zero during these years, the reason was that customers were skeptical about the security conditions in Libya, so some customers withdrew their money from the bank, while others found that the bank was the safest place to keep their money during unstable security conditions. Finally, the learning and growth perspective was better than the customer perspective; its average annual growth rate was about 3%. Most of the measures in this perspective scored 20 or less out of 50. In specific, the growth of the bank's branches scored zero from 2007-2010, and this is due to the unstable security conditions which prevented the bank from opening new branches .

9. Conclusions

This research work may be viewed as part of a diverse investigation of the usage of many performance evaluation approaches developed in the past few decades. It can, also, provide guidelines to organizations when they consider methods of performance evaluation. The purpose of this study was to increase our understanding on how the BSC approach may be developed and applied to measure the performance in the banking sector in Libya. This study has constructed a BSC model (including 20 measures) that was used to measure the JB performance. Despite the fact that the results of the performance of the JB look dim, we should not blame the bank for that for two reasons. Firstly, the security condition was not in favor of the bank, and secondly, the JB is not aware of the BSC as a performance tool .Although the JB did not use this

approach in the past, this study has highlighted the importance of viewing performance from other perspectives in addition to the financial perspective. The bank's administration realized the importance of this tool as a strategic and valuable performance management system, and has expressed its interest and willingness to learn this approach and to apply it in the future. The successful application of the BSC does not come from a vacuum; rather top management of the bank should demonstrate its commitment to the adoption of the BSC .Future researches in the banking sector in Libya are needed in this domain, and should focus on studying the contingent factors that facilitate or impede the implementation of the BSC such as: organizational culture, organizational structure ,private vs. public organizations, environment, and technology. More studies are, also, needed to identify the relevant measures of the BSC for the banking sector. The results of this work have many implications on the authorities of the Libyan Central Bank and policy makers in the financial sector in terms of the diffusion of the BSC as a systematic approach to performance evaluation. We expect that with the increased demands from stakeholders, financial sector analysts, educators, and practitioners the BSC shall be widely used in the banking sector in Libya shortly .

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