

EDUCATING THE LEARNING, GROWING AND INTERNAL PROCESS DIMENSIONS THROUGH BALANCED SCORECARD FOR A FINANCIAL PERFORMANCE

Ahmad Yousef Areiqat, Al-Ahliyya Amman University, Jordan
Ahmad M.A. Zamil, College of Business Administration, Prince Sattam bin Abdulaziz University, Saudi Arabia
Haider Mahmood, College of Business Administration, Prince Sattam bin Abdulaziz University, Saudi Arabia
Yacoub Hamdan, Al-Ahliyya Amman University, Jordan
Issam Aldabbagh, Al-Ahliyya Amman University, Jordan
Nihaiah Mahrakani, Al-Ahliyya Amman University, Jordan

ABSTRACT

This study explores the influence of educating the balanced scorecard indicators on the financial performance and investment decision in general industrial shareholding companies in Jordan. We collected the perception based data from the 122 financial and planning managers working in the industrial shareholding companies in Jordan. At first, we check the reliability of all constructs and their items through Cronbach Alpha test and ensured the validity of all constructs. There is a statistically significant impact of financial dimension, customer dimension, learning and growth dimension and internal process dimension on the financial performance of the general industrial shareholding companies using balance scorecard. It is recommended to educate the indicators of a balanced scorecard model since it contributes to improve the financial performance and investment decision. It is imperative to empower the employees through education and training to implement the balanced scorecard indicators. The companies should give more emphasis on developing training for the workers to achieve the growth and profitability using balance scorecards.

Keywords: Balanced Scorecard, Financial Performance, Investment Decision.

INTRODUCTION

The performance and growth of business organizations depend mainly on meeting current and future needs, which represent the components of the open business system. They face increasing competitions and challenges to focus on sustainable business development. In this context, these companies are relying on comprehensive evaluation of their performance in order to provide a clear image about performance. The literature indicated that an integrated assessment education requires utilizing wide-ranging measurement tool to evaluate different business perspectives. Balanced Scorecard (BSC) is an applied tool which was developed as a comprehensive assessment tool to assess the organization's performance (Kaplan & Norton,

1996). This tool is also used to measure the organization's performance and compare it with its objectives through evaluating different administrative trends and attitudes (Iselin et al., 2008).

The BSC measures various perspectives of companies' performance involving the internal and external activities. The internal activities include measuring the company's financial efficiency by using the financial scales by estimating a return on property rights, and the added value. The BSC is also concerned with measuring the operations within the company. Moreover, it measures the company's operational processes executed inside the organization. However, the company external efficiency is measured by focusing on the customer and continuous learning and growth. Therefore, this tool is distinguished from other measurement tools which could not take into consideration the perspective of integration in measuring companies' business activities. In addition, the inclusiveness in measuring performance by using balanced scorecard provides an opportunity for companies to conduct strategic analysis, to develop strategic plans and to make investment decisions. It would contribute in achieving company's progress and growth as well.

Business organizations are going through rapid changes which are reflected on various economic sectors because of the recent developments in telecommunications, the technological revolution, high level of competition and changes in business techniques, and to provide the high quality service to customers. Responding to the latest changes in administrative thinking styles, some researchers opted to study, analyze and evaluate organizations' strategic performance. This led to introduce the new concept measuring BSC (Kaplan & Norton, 1996). BSC is focused on achieving balance in performance measurement including multidimensional aspects and targeting various concerned parties as well. Since modern organizations are facing complex environmental variables. The decision-making process has become a serious challenge which requires utilizing the integrated measuring tool like BSC in order to achieve a better performance in a coherent business environment. This may be reflected on the Jordanian general industrial companies, and thus affect their role in the investment decision-making.

This research paper aims to find impact of adopting the financial dimensions, customer dimensions, learning and growing dimensions through BSC and to improve the decision-making efficiency of general industrial shareholding companies in Jordan. The importance of this study can be attributed to the fact that it deals with one of the crucial administrative issues that seek to maintain the achievements of business organizations and to guarantee their survival and sustainability. Hence, the educating the BSC is expected to reveal the interest of managers in business organizations as it is an effective tool for monitoring and measuring performance in general industrial shareholding companies. So, this tool is considered an attempt to adopt BSC and focuses on its effectiveness and influence to keep pace with recent developments and fulfill future aspirations of general industrial companies.

This research aims and seeks to shed light on the BSC dimensions such as financial dimensions, customer dimensions, learning and growing dimensions to investigate the effects of these dimensions on the financial decision-making process of general industrial shareholding companies listed in Amman Financial Market (AFM). In particular, the present study has following specific objectives:

1. To test the level of BSC dimensions such as financial dimensions, customer dimensions, learning and growing dimensions in the companies listed in AFM.
2. To find the level of financial dimensions such as return on investment, profitability, the rate of return on equity and reducing costs.

3. Based on above dimensions, to calculate the average financial performance.
4. To investigate the effects financial dimensions, customer dimensions, learning and growing dimensions on the financial performance of companies listed in AFM.

LITERATURE REVIEW

BSc is a tool which measures the companies' performance (Doudin, 2012). This study would address the financial and investment decision-making indicators. Learning and growth perspective emphasizes on investment in human resources to upgrade their competencies, skills, and production techniques systems with supportive education. This perspective tackles main resources of human resources which are systems, instructions, policies, regulatory measures and procedures (Idris & Al-Ghalebi, 2009). Investment decision of the companies or organizations could be adopted an adequate investment strategy to do their utmost investment in large sum of their funds in order to get the best return in a certain timeline considering the potential risk (Matar, 2009). Efficiency could be achieved the targeted goals by the best utilization of available resources in order to accomplish the outputs at low cost. Return On Investment (ROI) is an ability of assets to generates the income which reflects the level of the organization's profitability from its operational activities. This return is calculated by dividing the net profit on the average of the overall assets rate.

The method of using traditional techniques based on historical data to evaluate performance is no longer adequate and sufficient to take critical decisions. Therefore, BSC is developed to consider an evaluation system including compulsory activities (Sawalqa, 2011). Researchers argues that BSC is a tool which transforms the organizations' vision and strategy into the goals and standards which would contribute in business accomplishment and would develop a roadmap to achieve these goals. It is also a set of standards and benchmarks which reflects the organizations' performance and the level of their capacities to achieve goals (Al-Qahtani, 2014). We can realize the significance of BSC by discussing some privileges such as it encourages companies to focus on evaluating their short-term and the long-term performance rather than assessing the financial performance in the short-term goals (Doudin, 2012).

In term of developing organizational integrity, organizations' managers should have a deeper perception and awareness of the sound relationship between the process of decision-taking and strategic goals (Kaplan & Norton, 2006). Institutes should use a level of constructive interaction between monitoring and evaluation of intangible resources such as learning and establishing relations with customers (Nadim, 2012). BSC achieves an equilibrium between the processes of measurement and evaluation the outputs which are difficult to be measured in financial reams and these outputs could have a great impact on the companies' growth (Al-Maghrebi, 2011). BSC provides the managers with sufficient information to be able to take rational decisions without wasting time on un-needed details which would avoid confusion while taking decisions (Blasque, 2012).

Kaplan & Norton (2006) argued that BSC enabled an organization to attract competencies and skills and to develop incentives-based performance system for employees. It makes easier to meet the needs of stakeholders, customers and staff. Moreover, BSC averts the inflation of profit because of applied standards and scales for all operational practices. Sawalqa (2011) argued that companies can focus on the perspective of learning and growth. In the learning and growth perspective, organizations use to consider their employees as a financial cost which is represented a responsibility for running business operations. However, today human capital has

become one of the most vital assets of the organizations that has to attract highly qualified and experienced workforce and to motivate them to perform their tasks properly in the competitive cultural and economic global challenges.

BSC in the learning and growth perspective would help to achieve the goals, since it focuses on intellectual capacities, skills and talents of the human capital. In addition, this perspective addresses the information systems and the organizations' management procedures. It also stresses on the need to achieve coherence latest developments in the business styles. These efforts would achieve employees' satisfaction which could be helpful to retain their workforce and to motivate them for the optimum productivity. In this regard, people, regulations and organizational procedures may represent the infrastructure which has to be constructed by organizations to achieve sustainable development. Accordingly, the perspective focused on translation of organizations' vision into actions would boost the organizations' capacities supported by their staff (Sawalqa, 2011).

Hassan & Ahmad (2011) argued that the organizations' strategic goals should be clearly identified for the successful usage of BSC. Organizations have to develop a system approach and this approach involves the consistent and interactive relationship among all system components like inputs, processes, outputs and feedback. It is imperative that these organizations respond to the environment changes and pressures from increasing competition. The second aspect includes some activities and procedures that are to be taken by organizations to guarantee effective utilization of BSC (Rompho & Bangkok, 2011). It includes the realization that there are no standard solutions to be implemented. Adopting and supporting the organization's management team would be helpful following BSC. Selecting a set of benchmarks would consistent with a design to measure the success of achieving the objectives outlined in the strategy. Developing standards should be relevant to the organization's business style, to prevent providing the companies' management team with superfluous and redundant information which exceed their analytical capacities.

Regarding the causes of failure in BSC implementation, many organizations have applied the BSC which could not be successful to fulfil the expected results. Because, several organizations use to imitate formers designs and formats of BSC which are applied by other organizations regardless of their specific strategies. Few organizations fail to develop their strategic plans, as it is imperative to have clear strategic goals together with performance standards on a certain agenda. Organizations should follow a static and fixed model for adopting BSC whereas the utilization of this tool requires keeping pace with up-to-date developments in the business industry. In this regard, Niven (2011) stressed a reason behind failing to apply BSC appropriately which was due to a restricted model for the big companies with different circumstances. The absence of support from senior administration would reflect a lack of commitment to BSC implementation. Some organizations do not take into account the views of employees and stakeholders in the design of BSC. Lack of necessary technology to analyze the data could also be a reason. Failing to give the required importance to every perspective of the BSC could be a cause to deal with information related to performance and its measurement as confidential data. Though, it deprived the authorized team to develop the BSC.

The implementation of the BSC goes through the identifying the domain of the organization's business and its requirements, including the organizations' current status relating to its competitiveness, its market share and the level of employees' skills and expertise. Formulating organizational vision should be aligned with the vision to build-up performance standards (Adel, 2011; Areiqat & Al-Doori, 2018). Developing strategies and strategic goals

should translate the organization's vision into strategic goals through identifying the plans and strategies to achieve these goals, transforming the vision and strategy into inclusive standards indicators, to implement the strategies and to accomplish its financial and non-financial goals (Bernardo, 2010).

Development of the action plan should involve the final goals of the senior management in the form of proposals taking into account that these are consistent with the organization's vision. As, BSC gives the opportunity to monitor the course of operations and to make sure that such track is relevant to the strategic goals (Yahyaoui & Loudra, 2011). The executive activities could identify the activities and practices that should be made to accomplish the goals while allocating the resources and determining the responsibilities. Monitoring and evaluation should be considered to do a periodical follow-up to monitor the level of the accomplishment of goals. The efficiency of investment decision can be achieved by implementing BSC indicators to upgrade the effectiveness of the investment decision and financial performance. Accordingly, a sufficient information should be available in order to take an appropriate and rational resolution (Al Zeriqat, 2011). Hence, BSC would provide the decision-makers with sufficient information of the strategies to aware the all staff members to measure the consistent operational objectives.

Hu & Yang (2020) investigated the efficiency and performance of government website using BSC. All website performance indicators were set as unified fuzzy process and performance was evaluated using multi-level fuzzy methodology. They found that BSC helped to improve government website performance efficiency. Saprianto & Lukito (2020) examined the performance of business environment using BSC. The study suggested that quality of services, innovation and comparative advantages might be achieved if efficiency could be attained in the internal process, financial and customers related dimensions. Surjaatmadja & Kusniawati (2020) investigated the legal, human resource, financial and marketing performance of the pharmaceutical cooperation using BSC. They found a good level of financial management performance. Though, marketing, internal process and growth perspective were found low.

Raval et al. (2019) applied the BSC using six sigma method on the 9 manufacturing firms of the India. They found that the firms were found differently in the term of practicing the six sigma method and most of investigated firm were found more sensitive to the customers' viewpoints. Hashemi & Monavarian (2019) argued that knowledge-based management would help to sustain the comparative advantage. To evaluate the management-based system and strategies, they utilized the BSC to identify the major success factors to device for an improvement of the knowledge management. Darestani & Shamami (2019) applied the BSC for a purpose to implement the lean production to improve the efficiency of the system by recognizing the weakness and strengths in the process of business. They found that businesses were improved by adopting BSC mechanism which was observed through reduction of their cost at minimum level.

Literature signified the importance of using BSC for evaluation of the companies in the financial dimensions, customer dimensions, learning and growing dimensions and internal Process dimensions. But, literature is scant to the effects of these dimension on the financial performance of the companies. Particularly, the literature could not be investigated this issue in case of the companies registered in the AFM. This present study is highly motivated to find the effects of performance evaluation through BSC on the financial performance of the companies listed in AFM.

TOOLS AND METHODS

We hypothesize to test the effects of adopting balanced scorecard indicators on the financial performance and investment decision of the general industrial shareholding companies in Jordan. In particular, we test the influences of financial dimension, customer dimension, learning and growing dimension and internal process dimension on the financial performance and investment decision of selected companies. To test our hypothesis, we utilized the data collected by Al-Ahmar (2015). The data was collected from the 73 companies including 62 industrial shareholding companies trading at AFM, 8 non-listed industrial shareholding companies at AFM and 3 industrial shareholding companies which were restricted to deal with AFM. Al-Ahmar (2015) distributed 124 questionnaires among the top management of targeted companies and could collect 122 valid responses so response rate was 98.38%. The data was collected from chief financial manager and the planning director of every company. The BSC could have a greater usability in the large organizations to apply the financial, customer, learning and growing dimensions. Therefore, higher management from large companies were chosen for analyses. The higher management of the companies targeted due to a reason that these people are better position to understand the overall picture of targeted dimensions, might float the strategies to improve such dimensions and could observe the effects of these dimensions on the financial performance of the companies. The data collected by Al-ahmar (2015) had the perfect ability to serve the purposes of this present study e.g. to test the level of financial, customer, learning and growing dimensions of BSC and to test the effects of the BSC dimensions on the overall financial performance of the joint stock companies.

| Gender | Male | Female | | | |
|------------|-------------------|------------------|-------|--------------|--------------|
| | 86.9 | 13.1 | | | |
| Age | 25-30 | 31-40 | 41-50 | More than 51 | |
| | 11.5 | 49.2 | 24.6 | 14.8 | |
| Education | Bachelor | Master | PhD | | |
| | 78.7 | 4.9 | 16.4 | | |
| Job | Financial Manager | Planning Manager | | | |
| | 50 | 50 | | | |
| Experience | 0-5 | 6-10 | 11-15 | 16-20 | More than 20 |
| | 9.8 | 31.1 | 16.4 | 21.3 | 21.3 |

Table 1 shows the demographic aspect of surveyed managers of the companies. Table 2 shows that most of manager 86.9% were male and most of them 49.2% were from an age group of 31-40 years. Education profile shows that most of respondents 78.7% are carrying the bachelor degree and 16.4% are also carrying a highest degree PhD. To test the financial performance and planning behind this performance, data was collected from 50% financial managers and from 50% planning managers out of total respondents. It showed that both type of manager were selected in equal proportion to have a balance input from the planning and performance departments. Lastly, the experiences distribution is well distributed among all targeted experience-groups.

| Var. | Variable Description | No. of Items | Cronbach Alpha |
|-------------|--------------------------------|---------------------|-----------------------|
| Ind1 | Financial dimension | 5 | 0.82 |
| Ind2 | Customer dimension | 5 | 0.75 |
| Ind3 | Learning and growing dimension | 5 | 0.88 |
| Ind4 | Internal Process dimension | 5 | 0.87 |
| Dep1 | Return on investment | 5 | 0.89 |
| Dep2 | Profitability | 5 | 0.86 |
| Dep3 | The rate of return on equity | 5 | 0.88 |
| Dep4 | Reducing costs | 5 | 0.87 |
| FP | Financial Performance | 20 | 0.95 |

After demographic information discussions, Cronbach Alpha test is applied to test the strength of relationship among the items in each construct. We find that all dependent and independent variables have Cronbach Alpha at least more than 0.80 except the customer dimension which has Cronbach Alpha 0.75. Moreover, our objective is to test the effects of financial dimension, customer dimension, learning and growing dimension and internal process dimension on the financial performance. So, we construct financial performance variable by combining all 20 items of dependent variables and its Cronbach Alpha value is 0.95 which show an excellent strength of relationship. Overall, the all the constructs are shown the validity to proceed for further analyses (Table 2).

DATA ANALYSES

At first, we discuss the financial dimension's activities of the companies in the Table 3. The average responses of items of financial dimension are greater than 4 in all items. Further, the overall average of financial dimension is 4.47 with a Standard Deviation (SD) 0.54 and it shows that a high level of accepted perception. So, it shows that companies have well-performed *in the financial matters. The highest average scores 4.66 and 4.67 are found for the items "The company evaluates the overall financial position" and "The company is following up its sales volume"*. It means that companies' financial evaluation and sale volume are increasing financial dimension of the companies. The least average score is found for item *"The company assesses the amount of interest from various activities"*. It means that estimating interest gets least attention in the financial matters.

| S.N. | Item | Min | Max | Mean | S. D. |
|-------------|--|------------|------------|-------------|--------------|
| 1 | The company evaluates the liquidity flow | 3 | 5 | 4.49 | 0.59 |
| 2 | The company is working to find sources that provide additional returns | 3 | 5 | 4.28 | 0.66 |
| 3 | The company assesses the amount of interest from various activities | 3 | 5 | 4.26 | 0.70 |
| 4 | The company evaluates the overall financial position | 3 | 5 | 4.67 | 0.54 |
| 5 | The company is following up its sales volume | 3 | 5 | 4.66 | 0.54 |
| Avg | Financial dimension | 3 | 5 | 4.47 | 0.46 |

The customer dimension of the companies is shown in the Table 4. The average responses on the customer dimension are greater than 4 for 3 out of 5 items. The overall average of customer dimension is 3.9 with a SD of 0.6 which shows at least near to the acceptance level. So, it shows that companies are well-performing in the customer matters. A highest average score 4.18 is found for an item “*The company measures the degree of customer satisfaction*”. It means that companies’ measuring the customers’ satisfaction is found most effective in the customer dimension of the companies. The least average score 3.46 is found for item “*The company engages customers in evaluating the company*”. It means that companies could not give proper attention in customers’ engagement in company’s evaluation.

| S.N. | Item | Min | Max | Mean | S. D. |
|-------------|---|------------|------------|-------------|--------------|
| 1 | The company is evaluating the added value on the service provided to the customer | 2 | 5 | 4.00 | 0.75 |
| 2 | The company determines the lowest value for sales by which to provide a distinctive service to the customer | 2 | 5 | 3.82 | 0.92 |
| 3 | The company measures the degree of customer satisfaction | 1 | 5 | 4.18 | 0.80 |
| 4 | The company adopts strategies to increase customer satisfaction | 2 | 5 | 4.02 | 0.74 |
| 5 | The company engages customers in evaluating the company | 1 | 5 | 3.46 | 0.99 |
| avg | Customer dimension | 1 | 5 | 3.90 | 0.60 |

The learning and growing dimension of the companies is shown in the Table 5. The average responses on learning and growing dimension are greater than 4 for 3 out of 5 items. The overall average of learning and growing dimension is 4.13 with a SD 0.65 which shows the acceptance level about overall learning and growing dimension. So, it shows that companies are well-performing in the learning and growing matters. A highest average score 4.52 is found for an item “*The company evaluates its employees*”. It means that companies’ evaluating the employees is found most effective in the learning and growing dimension of the companies. The least average score 3.92 is found for item “*The company connects learning and growth with the company's long and short-term goals*”. It means that companies could not give proper attention to the learning and growth in the companies’ long and short run goals.

| S.N. | Item | Min | Max | Mean | S. D. |
|-------------|---|------------|------------|-------------|--------------|
| 1 | The company determines the training needs | 1 | 5 | 4.16 | 0.78 |
| 2 | The company links the learning process to the company's strategic goals | 1 | 5 | 3.95 | 0.84 |
| 3 | The company evaluates its employees | 3 | 5 | 4.52 | 0.59 |
| 4 | The company directs training Process on site | 2 | 5 | 4.11 | 0.82 |
| 5 | The company connects learning and growth with the company's long and short-term goals | 2 | 5 | 3.92 | 0.86 |
| Avg | Learning and growing dimension | 1 | 5 | 4.13 | 0.65 |

The internal process dimension of the companies is shown in the Table 6. The average responses on internal process dimension are greater than 4 for 2 out of 5 items. The overall average of internal process dimension is 3.93 with a SD 0.62 which shows a nearby acceptance level about overall internal process dimension. So, it shows that companies are well-performing

for the internal process matters. A highest average score 4.02 is found for an item “*The company distributes responsibilities in an effective manner*”. It means that companies’ responsibilities distribution is found most effective in the internal process dimension of the companies. The least average score 3.77 is found for item “*The company measures its strategic skills*”. It means that companies could not measure the strategic skills appropriately.

| S.N. | Item | Min | Max | Mean | S. D. |
|------|---|-----|-----|------|-------|
| 1 | The company determines its technological needs | 2 | 5 | 4 | 0.77 |
| 2 | The company measures its strategic skills | 2 | 5 | 3.77 | 0.74 |
| 3 | The company facilitates the use of strategic tools at work | 2 | 5 | 3.98 | 0.78 |
| 4 | The company distributes responsibilities in an effective manner | 2 | 5 | 4.02 | 0.72 |
| 5 | The company works to reconcile its operations with learning and the company's long and short-term goals | 2 | 5 | 3.90 | 0.85 |
| Avg | Internal Process dimension | 2 | 5 | 3.93 | 0.62 |

The return on investment dimension of the companies is shown in the Table 7. The average responses on the return on investment dimension are greater than 4 for 3 out of 5 items. The overall average of internal process dimension is 4.04 with a SD 0.65 which shows an acceptance level about overall return on investment dimension. So, it shows that companies are well-performing for the return on investment. A highest average score 4.20 is found for an item “*The company is directing to improve return on investment*”. It means that companies’ companies’ direction to improve returns on investment is found most effective in this dimension. The least average score 3.90 is found for item “*The company corrects the performance of various investment activities*”. It means that companies could not correct the performance of investment activities.

| S.N. | Item | Min | Max | Mean | S. D. |
|------|--|-----|-----|------|-------|
| 1 | The company adds activities that generate additional returns | 2 | 5 | 4.02 | 0.80 |
| 2 | The company measures the amount of returns generated from various activities | 3 | 5 | 4.13 | 0.72 |
| 3 | The company is directing to improve return on investment | 2 | 5 | 4.20 | 0.81 |
| 4 | The company is concerned with all activities that achieve returns with the same degree | 2 | 5 | 3.95 | 0.76 |
| 5 | The company corrects the performance of various investment activities | 2 | 5 | 3.90 | 0.79 |
| Avg | Return on investment | 2 | 5 | 4.04 | 0.65 |

The profitability dimension of the companies is shown in the Table 8. The average responses on profitability dimension are greater than 4 in all items. The overall average of internal process dimension is 4.20 with a SD 0.61 which shows a good acceptance level about overall profitability dimension. So, it shows that companies are well-performing in the profitability. A highest average score 4.34 is found for an item “*The company is developing plans to improve realized returns*”. It means that companies’ plans to improve realized returns are found most effective in the profitability dimension of the companies. The least average score

4.02 is found for item “*The company measures profitability for the consumer*”. It means that companies could not focus well to measure the profitability for the consumer.

| S.N. | Item | Mini | Max | Mean | S. D. |
|-------------|--|-------------|------------|-------------|--------------|
| 1 | The company is developing plans to improve Realized returns | 2 | 5 | 4.34 | 0.73 |
| 2 | The company determines the appropriate profitability from various activities | 2 | 5 | 4.13 | 0.76 |
| 3 | The company measures profitability for the consumer | 2 | 5 | 4.02 | 0.86 |
| 4 | The company is working to improve profitability | 3 | 5 | 4.31 | 0.67 |
| 5 | The company connects profitability and liquidity | 2 | 5 | 4.18 | 0.78 |
| Avg | Profitability | 2 | 5 | 4.20 | 0.61 |

The return on equity dimension of the companies is shown in the Table 9. The average responses of return on equity dimension are greater than 4 in 3 out of 5 items. The overall average of internal process dimension is 3.96 with a SD 0.63 which shows an about acceptance level for overall return on equity dimension. So, it shows that companies are well-performing for the return on equity. A highest average score 4.08 is found for an item “*The company makes a comparison of the return on equity for the different years of the company*”. It means that companies’ temporal comparison analyses are found most effective in the return on equity dimension of the companies. The least average score 3.70 is found for item “*The company designs an appropriate return on equity for each activity*”. It means that companies could not estimate the exact return for each activity.

| S.N. | Item | Min | Max | Mean | S. D. |
|-------------|---|------------|------------|-------------|--------------|
| 1 | The company is improving the return on equity from various activities | 3 | 5 | 3.97 | 0.73 |
| 2 | The company provides regular information on the growth of return on equity | 2 | 5 | 4.00 | 0.70 |
| 3 | The company determines the best return on equity from the activity for the company | 2 | 5 | 4.03 | 0.79 |
| 4 | The company designs an appropriate return on equity for each activity | 1 | 5 | 3.70 | 0.80 |
| 5 | The company makes a comparison of the return on equity for the different years of the company | 1 | 5 | 4.08 | 0.82 |
| Avg | The rate of return on equity | 1 | 5 | 3.96 | 0.63 |

The reducing cost dimension of the companies is shown in the Table 10. The average responses of reducing cost dimension are greater than 4 in all items. The overall average of reducing cost dimension is 4.28 with a SD 0.61 which shows a good acceptance level about overall reducing cost dimension. So, it shows that companies are well-performing in reducing the cost. A highest average score 4.44 is found for an item “*The company provides information about the different costs within the company*”. It means that companies’ cost information is found most effective in reducing the cost.

| S.N. | Item | Min | Max | Mean | S. D. |
|------|---|-----|-----|------|-------|
| 1 | The company provides information about the different costs within the company | 3 | 5 | 4.44 | 0.67 |
| 2 | The company reduces costs within the company | 3 | 5 | 4.36 | 0.66 |
| 3 | The company provides information about the stages of work that can be shortened | 1 | 5 | 4.16 | 0.82 |
| 4 | The company measures the best investment for production inputs in the company | 2 | 5 | 4.16 | 0.80 |
| 5 | The company is working to determine its cost-effectiveness | 2 | 5 | 4.28 | 0.79 |
| avg | Reducing cost | 2 | 5 | 4.28 | 0.61 |

Table 11 shows the regression results of the effects of financial dimension, customer dimension, learning and growing dimension and internal process dimension on the financial performance of the companies. At first, goodness of fit F-value shows that model is good fitted at 1% level of significance. The coefficient of determination (R^2) showed that 48% financial performance is explained by the regressed determinants.

| Variable | Coeff | SE | t | P |
|--------------------------------|--------|-------|-------|-------|
| financial dimension | 0.341 | 0.106 | 3.217 | 0.002 |
| Customer dimension | 0.134 | 0.072 | 1.847 | 0.067 |
| learning and growing dimension | 0.012 | 0.080 | 0.148 | 0.882 |
| Internal process dimension | 0.322 | 0.084 | 3.850 | 0.000 |
| Intercept | 0.758 | 0.366 | 2.071 | 0.041 |
| Goodness of Fit (F-value) | 27.008 | | | 0.000 |
| R^2 | 0.480 | | | |

The regression's result shows that effects of financial dimension, customer dimension, and internal process dimension on the financial performance of the companies are found positive and significant. So, the company's efforts for financial dimension, customer dimension, and internal process dimension are found very helpful in improving the financial performance of the companies. In the comparison, the financial dimension has greatest effect on the financial performance of the companies. It means that the companies' inputs in the financial aspects are important for the profitability and investment decisions. However, the magnitude of the effect of the internal process dimension is also found nearby to the magnitude of the financial dimension. It means that internal process of the companies also does matter equally in the higher productivity and profitability to achieve the higher financial performance. However, learning and growing dimension could not affect the financial performance of the companies.

CONCLUSIONS AND IMPLICATIONS

This study investigates the effects of adopting balanced scorecard indicators on the financial performance of the industrial shareholding companies in Jordan. We utilize the perception based data from 122 financial and planning managers working in the industrial shareholding companies in Jordan. At first, we test the reliability of all hypothesized constructs with their items through Cronbach Alpha test and find the valid constructs. The effects of financial dimension, customer dimension, and internal process dimension on the financial

performance of the companies are found positive and significant. Therefore, the financial dimension, customer dimension, and internal process dimension have helped the companies to improve the financial performance. The magnitude of effect of financial dimension is found greatest among others and effect of internal process dimension also carries the same level of effect on the financial performance. It means that the companies' inputs in the financial aspects and internal process are found helpful in improving profitability and financial performance. Which could also help in the investment decision-making process. The learning and growing dimension has insignificant effect on the financial performance of the companies. It looks vital to empower the employees through education and training of implementation the BSC indicators. General industrial shareholding companies in Jordan should give more emphases on developing training for the workers to achieve the growth and profitability using balance scorecards. Moreover, adopting the indicators of the BSC's model of performance are advisable for the financial efficiency and investment-decision process of the shareholding companies in the Jordan. Empowering staff through learning and training would help to qualify the employees to enhance the implementation of the BSC indicators. The general industrial shareholding companies in Jordan should give more focus on strengthening the relationship between the workers' training, qualification and the accomplishment of growth and profitability.

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