



## The Possibility of Using Balance Scorecard (BSC) in Evaluating the Performance of Internal Control in Jordanian Commercial Banks (JCB)

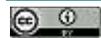
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### Abstract

This Study aimed to determine the possibility of using Balance Scorecard (BSC) in evaluating the performance of internal control in Jordanian Commercial Banks, The BSC considered one of the modern tools in banks management to improve banks performance and diversity of services provided by banks. The present research investigates possibility of using BSC in evaluating the performance of internal control in selected JCB. In order to achieve the objectives of the study and the testing of hypotheses, the researcher designed a questionnaire; this questionnaire distributed to managers, internal managers and employees in Jordanian Commercial Banks, Out of the 450 questionnaires distributed, 370 were recovered with an adoption to be valid for statistical analysis purposes (345) at a rate of 77%. The findings revealed that balanced scorecard approach has a significant impact on the organizational performance of banks under study and there is a possibility of using BSC in evaluating the performance of internal control in JCB.

**Keywords:** Balance scorecard; Internal control; Commercial banks; Performance.



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### 1. Introduction

Banks considered one of the most important pillars of the economy and its development, as is evident in the evolution and diversity of services provided by banks. To achieve this progress and development efficiently and effectively, the importance of measuring and evaluating internal control appeared in order to reach the required performance of these services.

From this standpoint, the importance of using the Balanced Scorecard (BSC) in assessing the performance of internal control appeared.

The term Balanced Scorecard (BSC) reflects the balanced between short and long term objectives, between financial and non-financial measures, between lagging and leading indicators, and between external and internal performance perspectives (Kaplan and Norton, 1996). Balanced Scorecard is a measurement system that enables organizations to clarify their vision and strategy and translate them into action. It provides feedback around both the internal business processes and external outcomes in order to continuously improve strategic performance and results (Thomas *et al.*, 2014). BSC is a framework which translates an organization's vision and strategy into a coherent set of performance measures. It helps business to evaluate how well they meet their objectives. The BSC is a performance measurement system using a multi-dimensional scorecard to translate strategy into a balance of financial and non-financial performance measures. BSC is a combination of non-financial and financial measures developed to meet the shortcomings of traditional management control and performance measurement systems. BSC incorporates financial performance measures with non-financial performance measures in areas such as involving customers, internal processes and learning and growth (Mooraj *et al.*, 2009).

BSC is a conceptual framework for translating an organization's strategic objectives into a set of performance indicators distributed among four perspectives- financial, customer, internal business process and learning- growth. BSC is a valuation methodology that converts an organization's value drive-such as customers, services, financial performance, operational efficiency and innovation- to a series of defined metrics, records and analyses these matrices to help determine if they are achieving strategic goals'. It explains how the BSC is a system that converts value drivers of the organization into metrics to evaluate strategic goal achievement (Phillips and Louvieris, 2005).

BSC is a performance measurement system derived from vision-strategy and reflects the most important aspects of the business. BSC is a new management concept which helps managers at all levels to monitor results in their key areas (Khanka, 2012).

It monitors current performance as well as tries to gather information about how well the organization is positioned to perform better in future. BSC focuses on the link between business process and decisions and results. It is considered as a device to guide formulation, implementation and communication. It also helps in tracking the performance and evaluation. To conclude, it can be said that BSC is a system of combining financial and non-financial measures of performance in one single scorecard. It includes performance measures for four perspectives; financial, customer, internal business process and learning-growth (Chow *et al.*, 2012).

## 2. Objectives of the Study

The importance of this research stems from the fact that it is looking to discuss and determine the concept of balanced scorecard and the possibility of using it in the evaluation of internal control in Jordanian Commercial Banks, and that will improve the position of banks, which contributes to enhancing their competitive position in the long term.

Accordingly, the research seeks to achieve the following objectives:

- 1- To discuss the concept of balanced scorecard approach.
- 2- Familiarize yourself with the appropriate environment and the essential ingredients needed to use a balanced scorecard in Jordanian banks.
- 3- Learn about the possibility of applying the Balanced Scorecard in evaluating the performance of internal control in Jordanian Commercial Banks

## 3. Literature Review and Theoretical Framework

Internal control is defined as a set of methods and procedures used to develop efficient regulation and promote acceptance of sound policies and procedures in the Commission. This is used for checking the validity of information management, protection of assets, and for minimizing mistakes (Arab Organization of Supreme Audit Institutions Arabosai, 2012).

It was also defined by complex internal auditors. The Institute of Internal Auditor's latest definition of internal auditing can be defined as an independent objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization to accomplish its objectives by bringing a systematic and a disciplined approach in evaluating and improving the effectiveness of risk management, control, and governance processes (Institute of Internal Auditors IIA, 2011).

The subject of performance evaluation has gained importance especially due to the contemporary economic developments, it is necessary for the organization to resort to performance evaluation in order to know the degree of achieving the goals and the actual operating rates.

## 4. Banks Performance Criteria and Indicators

Commercial banks performance is evaluated through several criteria that express the financial position of the bank and the safety of its operation and management. It also enables the identification of strengths and weaknesses in various aspects of performance.

Given that the internal control is an ongoing process and not an independent administrative function, it is rather necessary to guide performance and reassurance that actual performance is carried out in accordance with the planned standards.

The success of internal controls is strongly associated with five elements (Candreva, 2006; Messier, 1997): control environment, risk assessment, control activities, information and communication and monitoring

To evaluate and assess the procedures of the internal control, the study came to explain the role of BSC in assessing internal control because of its importance and effectiveness in controlling performance within banks

The Balanced Scorecard was developed by Kaplan and Norton (1992). Kaplan and Norton thought that measuring the financial performance is not enough to affect the companies' ability to create value (Rillyan et al., 2016). It is a complementary strategic model that considers financial and non-financial measures, and translates the organizational mission and strategy into a collection of performance measures (Abu Alsonos and Momani, 2013).

There are different definitions of BSC, the most important of these definitions is that of Kaplan and Norton (1996) definition: "A management system designed to help the organization to translate its vision and strategy into a set of objectives and strategic measures that are linked through four perspectives: Financial Perspective, Customer Perspective, Internal Processes Perspective, and Learning and Growth Perspective." Subsequently, Balanced Scorecard has been also defined as "a set of financial and non-financial performance measures which provides a clear vision of the organizations performance to senior management executives" (Kaplan and Atkinson, 1998).

Fig-1. The general structure of the Balanced Scorecard



Source: Kaplan and Norton (1996)

As we mention above the perspective of BSC include the following:

#### 4.1. First: Financial Perspective

Financial Perspective consider the main perspective of BSC, This was despite the fact that most researchers criticize the financial perspective and support the non-financial perspective. It is worth mentioning that many of them consider that the ultimate goal of organization is to achieve financial goals [Niven \(2006\)](#); [AL shaikh and Mohammed \(2007\)](#), this perspective described in different literature review such as [Umar and Olatunde \(2011\)](#), in their study on “Performance Evaluation of Consolidated banks in Nigeria by using Non-Financial measures”, evaluated the performance of four consolidated banks in Nigeria. They identified the 7 non financial measures of bank performance out of 43 measures through factor analysis and assessed the overall performance of banks. Simple Random Sampling was used to select samples (customers of 4 Banks). Structured disguised Questionnaires were used to collect the data from 303 customers. Barlitt test of Sphericity for testing hypothesis and Kaiser-Meyer-Olkin method was used to measure sampling adequacy and multiple regression was used to find out variation caused by Non-financial measure in banks performance. They recommended that identified seven non-financial measures named: Cost of transaction, Information technology, service delivery, quality of service, bank offering, loan application and customer satisfaction should be adopted to fundamentally improve financial performance of consolidated banks.

#### 4.2. Second: Customer Perspective

This perspective aims to answer questions on how costumers view the organization ([Al- Bishtawi, 2001](#)). It is the essence of non-financial perspective ([Niven, 2006](#)). This perspective focuses on providing measures to achieve the specific goals regarding customers' satisfaction and to meet their requirements in obtaining high quality products and reasonable prices through market share analysis ([Kaplan and Norton, 1996](#)). In addition, the main focus of this perspective is to select strategies that meet customers' satisfaction and expand target market in order to enhance the competitive opportunity ([Kaplan and Norton, 2004](#)), this perspective described in different literature review such as : [Ombuna \(2013\)](#) conducted by entitled, “*Impact of Balanced Scorecard Usage on the Performance of Commercial Banks*” explored the effect of balance scorecard usage on the performance of commercial banks in Nakuru District, Kenya. The sample size of the study was 72 respondents which include operations managers, human resource managers, branch managers and customer service mangers. The author applied Pearson's correlation to test the relationship between variables. The study revealed that the effectiveness of BSC usage lies on the organizations dynamics, execution, monitoring and evaluation procedures. Besides, it was revealed that BSC usage has a positive impact on the performance of commercial banks and it helps organizations in clarifying their vision and strategy. The authors suggested that banks should develop products and services that have competitive advantage in order to get competitive advantage and to satisfy the needs of customers.

In addition, [Northcott \(2011\)](#) conducted a study entitled “Using the Balanced Scorecard to Manage Performance in Public Sector Organizations – Issues and Challenges (practical case in the local government organizations in New Zealand).” However, the results of this study indicated that there is a decline in the use of the Balanced Scorecard by public sector organizations involved in the study. The study figured out the most important obstacles in applying the Balanced Scorecard in the public sectors. Thus, these obstacles include the fact that the traditional perspective of the Balanced Scorecard is inadequate to the public sector, especially the customer perspective. Also, it entails the inability to identify the effective relationship between cause and effect which is related to determining the performance measures.

#### 4.3. Third: Internal Business Process Perspective

It is the perspective that related to the internal business process of the organization in which they meets the expectations of customers and ultimately shareholders, It identifies the critical processes, skills, competencies and technologies that add value to the expectation of customers and the success of the firm ([Atkinson, 2006](#)).

As in [Irbihat and Ashraf \(2017\)](#) in their research paper entitled, “*Impact of Balanced Scorecard Usage on the Organizational Performance: A Case Study of Jordan International Insurance*” examined the impact of balanced scorecard approach on the organizational performance of Jordan International Insurance. Data was collected with the help of a well structured questionnaire from 175 employees working in Jordan International Insurance. Besides, linear regression was used to test the hypotheses. The findings showed that customer perspective, internal business process perspective, learning and growth perspective, and financial perspective have a significant impact on the organizational performance because significant value in each variable was less than 0.05. Therefore, the research concluded that balanced scorecard approach has a significant impact on the organizational performance in Jordan International Insurance.

#### 4.4. Forth: Learning and Growth Perspective

This perspective related to the organization employees Managers should perceive measures to answer the following question: How we will sustain our ability to change and improve to achieve our vision?

This is what we can see in [Wu et al. \(2009\)](#) in their study on “A Fuzzy MCDM Approach for evaluating banking performance based on Balanced Scorecard” identified 23 evaluation indexes from 55 indexes suitable for banking performance in terms of BSC perspective through expert opinions. Four BSC perspectives were ranked in the relative importance in the order Customer then Finance then learning & Growth and last internal process using

FAHP process. Customer satisfaction, return on assets, earning per share, customer retention rate and profit per customer were found as top five evaluation indexes. U bank, C Bank and S bank respectively were ranked on the basis of performance using MCDM analytical methods. They suggested that there is no one performance evaluation index to fit all so it should be tailored to meet organization's overall goals as well as the objectives of each individual unit. The performance evaluation indexes of the BSC perspective may not be mutually independent so other analytical methods can be employed to solve the interactive and feedback relations among indexes.

And in Ibrahim (2015), conducted a study entitled "Investigating the Use of the Four Perspectives of Balanced Scorecard (BSC) as a Technique for Assessing Performance by Nigerian Banks". This study was carried out in an attempt to discover the use of BSC as a tool for measuring the performance of Nigerian banks. It is intended to fill a gap concerning the little attention to the use of BSC in Nigeria. The concepts of performance and its measurements, financial and non-financial measures of performance and the concept of BSC have been discussed. The preliminary population of the study encompassed 21 banks operating in Nigeria, and the use of a judgmental/purposive sampling technique reduced the sample to eleven banks. To collect data, a survey technique using questionnaires was used. The descriptive statistics and Kruskal-

Wallis ANOVA and descriptive statistics have been used to analyze the data. The study concluded that Nigerian banks depend on financial and customer performance measures as a technique to assess their performance. A comprehensive view of the performance of Nigerian banks cannot be assured without incorporating all the four perspectives of BSC. Ibrahim recommended that Nigerian banks should improve their performance measurement systems by harmonizing their performance measures within the four views of BSC.

## 5. Hypotheses of the Study

To achieve the purpose of the study the researcher has proposed Main hypotheses branches in to four sub-hypotheses, which will tested in this study.

H0: BSC cannot be used to evaluate the performance of internal control in Jordanian commercial banks

Ho1: Financial perspective of BSC cannot be used to evaluate the performance of internal control in Jordanian commercial banks

Ho2: Customer perspective of BSC cannot be used to evaluate the performance of internal control in Jordanian commercial banks

Ho3: Internal Business Process Perspective of BSC cannot be used to evaluate the performance of internal control in Jordanian commercial banks

Ho4: Learning and Growth Perspective of BSC cannot be used to evaluate the performance of internal control in Jordanian commercial banks.

## 6. Research Methodology

The researcher distributed questionnaires to all members of the sample (Internal Control Manager, Director and Financial Controller, Head of Department, Employee) (450) personally and recovered (370) of the questionnaires. Furthermore, it shows the validity of the questionnaires recovered to be valid for statistical analysis purposes (345) at a rate of 0.77 as shown in table (1)

Table-1. Distributed Questionnaires of the selected Banks

Banks Name	Questionnaires		
	Distributed	Accepted	valid for statistical analysis
Cairo Amman Bank	75	57	54
Housing Bank	75	60	56
Jordan Commercial Bank	75	59	55
Bank al Etihad	75	62	59
Bank of Jordan	75	65	62
Jordan Ahli Bank	75	67	59
Total	450	370	345

## 7. Hypotheses Testing

### 7.1. Analysis of Major Hypothesis

H0: BSC cannot be used to evaluate the performance of internal control in Jordanian commercial banks

In testing this hypothesis, the researcher used T-test for one sample. This is used to verify the possibility of using balance scorecard (BSC) in evaluating the performance of internal control in Jordanian Commercial Banks (JCB) as shown in Table (2)

**Table-2.** T- test value to verify The Possibility of Using Balance Scorecard (BSC) in Evaluating the Performance of Internal Control in Jordanian Commercial Banks (JCB)

Major hypothesis	NO.	Arithmetic Mean	Standard Deviation	DF	Calculated T value	Tabulated T Value	Sig*
BSC can be used to evaluate the performance of internal control in Jordanian commercial banks	345	3.561	.621	85	7.891	1.569	0.000

Demonstrated by the results shown in the table (2) BSC can be used to evaluate the performance of internal control in Jordanian commercial banks has a significance level ( $\alpha \leq 0.05$ ).

The calculated T- value function is 7.891 and the indication level is  $\alpha \leq 0.05$ , when compared with tabulated T – Value 1.569 The table also shows the same level indication (0.000).

As such, BSC can be used to evaluate the performance of internal control in Jordanian commercial banks.

### 7.1.1. Analysis of First Sub- Hypothesis

**Ho1:** Financial perspective of BSC cannot be used to evaluate the performance of internal control in Jordanian commercial banks

**Table-3.** T- test value to verify The Possibility of Using Financial perspective of (BSC) in Evaluating the Performance of Internal Control in Jordanian Commercial Banks (JCB)

Major hypothesis	NO.	Arithmetic Mean	Standard Deviation	DF	Calculated T value	Tabulated T Value	Sig*
Financial perspective of BSC can be used to evaluate the performance of internal control in Jordanian commercial banks	345	3.481	.552	85	6.921	1.421	0.000

Demonstrated by the results shown in the table (3) Financial perspective of BSC can be used to evaluate the performance of internal control in Jordanian commercial banks has a significance level ( $\alpha \leq 0.05$ ).

The calculated T- value function is 6.921 and the indication level is  $\alpha \leq 0.05$ , when compared with tabulated T – Value 1.421 The table also shows the same level indication (0.000).

As such, financial perspective of BSC can be used to evaluate the performance of internal control in Jordanian commercial banks

### 7.1.2. Analysis of Second Sub- Hypothesis

**Ho2:** Customer perspective of BSC cannot be used to evaluate the performance of internal control in Jordanian commercial banks

**Table-4.** T- test value to verify The Possibility of Customer perspective of (BSC) in Evaluating the Performance of Internal Control in Jordanian Commercial Banks (JCB)

major hypothesis	NO.	Arithmetic Mean	Standard Deviation	DF	Calculated T value	Tabulated T Value	Sig*
Customer perspective of BSC can be used to evaluate the performance of internal control in Jordanian commercial	345	3.512	.642	85	8.101	1.561	0.000

Demonstrated by the results shown in the table (4) Customer perspective of BSC can be used to evaluate the performance of internal control in Jordanian commercial banks has a significance level ( $\alpha \leq 0.05$ ).

The calculated T- value function is 8.101 and the indication level is  $\alpha \leq 0.05$ , when compared with tabulated T – Value 1.561 The table also shows the same level indication (0.000).

As such, Customer perspective of BSC can be used to evaluate the performance of internal control in Jordanian commercial banks

### 7.1.3. Analysis of Third Sub- Hypothesis

**Ho3:** Internal Business Process Perspective of BSC cannot be used to evaluate the performance of internal control in Jordanian commercial banks

**Table-5.** T- test value to verify The Possibility of Using Internal Business Process perspective of (BSC) in evaluating the performance of internal in Jordanian Commercial Banks (JCB)

Major hypothesis	NO.	Arithmetic Mean	Standard Deviation	DF	Calculated T value	Tabulated T Value	Sig*
Internal Business Process Perspective of BSC can be used to evaluate the performance of internal control in Jordanian commercial	345	3.872	0.571	85	6.502	1.435	0.000

Demonstrated by the results shown in the table (5) Customers perspective of BSC can be used to evaluate the performance of internal control in Jordanian commercial banks has a significance level ( $\alpha \leq 0.05$ ).

The calculated T- value function is 6.502 and the indication level is  $\alpha \leq 0.05$ , when compared with tabulated T – Value 1.435 The table also shows the same level indication (0.000).

As such, Internal Business Process Perspective of BSC can be used to evaluate the performance of internal control in Jordanian commercial banks

#### 7.1.4. Analysis of Fourth Sub- Hypothesis

**Ho4:** Learning and Growth Perspective of BSC cannot be used to evaluate the performance of internal control in Jordanian commercial banks.

**Table-6.** T- test value to verify The Possibility of Using Learning and Growth Perspective of (BSC) in Evaluating the Performance of Internal Control in Jordanian Commercial Banks (JCB)

Major hypothesis	NO.	Arithmetic Mean	Standard Deviation	DF	Calculated T value	Tabulated T Value	Sig*
Learning and Growth Perspective of BSC can be used to evaluate the performance of internal control in Jordanian commercial	345	3.694	0.583	85	8.702	1.596	0.000

Demonstrated by the results shown in the table (6) Learning and Growth perspective of BSC can be used to evaluate the performance of internal control in Jordanian commercial banks has a significance level ( $\alpha \leq 0.05$ ).

The calculated T- value function is 8.702 and the indication level is  $\alpha \leq 0.05$ , when compared with tabulated T – Value 1.596 The table also shows the same level indication (0.000).

As such, Learning and Growth Perspective of BSC can be used to evaluate the performance of internal control in Jordanian commercial banks.

## 8. Conclusion

BSC is a framework convert strategy and vision of organization in to cohesive set of performance measure, and helps business manager to improve and develop how well they meet their objectives.

The findings of the research highlighted that we can use BSC to evaluate the performance of internal control in JCB, consisting of its four perspectives:

Financial perspective, Customer perspective, Internal Business Process Perspective, Learning and Growth Perspective which is contribute that BSC is a framework convert strategy and vision of organization in to cohesive set of performance measure as we mention above.

BSC consider the best model used to evaluate the organization performance in a non-financial and financial measures using the four mention perspectives.

From the above, it appears to us that the use of BSC to evaluate internal control in the study community increases its effectiveness and efficiency

The researcher recommends continuing research in this field because of its importance

## References

- Abu Alsonos, j. and Momani, G. (2013). The Impact of the Jordanian dinar exchange rate fluctuation on the share values of the public shareholding in the Services Sector. *The Journal of Islamic University of Economics and Administrative Studies*, 20(2): 485-510.
- Al- Bishtawi, S. (2001). *Performance evaluation based on BSC system using integration between costing system and management based on activities-a case study for one of the Jordanian banks*. Unpublished dissertation, Al-Mustansarya university.
- AL shaikh, A. and Mohammed, N. (2007). *Performance evaluation of Palestinian telecommunication corporations by using balanced scorecard approach, unpublished master college of commerce*. Islamic University: Gaza, Palestine.
- Arab Organization of Supreme Audit Institutions Arabosai (2012).

- Atkinson, H. (2006). Performance measurement in the international hospitality industry. *Accounting and Financial Management*: 46. Available: [https://www.researchgate.net/publication/265232868\\_Performance\\_measurement\\_in\\_the\\_international\\_hospitality\\_industry](https://www.researchgate.net/publication/265232868_Performance_measurement_in_the_international_hospitality_industry)
- Candrea, P. J. (2006). Controlling internal controls. *Public Administration Review*: 463-65.
- Chow, C., Haddad, K. and Williamson, J. (2012). Applying the balanced scorecard to small companies. *Management Accounting (USA)*, 79(2): 21-27.
- Ibrahim, M. (2015). Investigating the use of the four perspectives of balanced scorecard (bsc) as technique for assessing performance by Nigerian banks. *Journal of Accounting and Taxation*, 7(4): 62-70.
- Institute of Internal Auditors IIA (2011). Internal auditing role in risk management.
- Irbihat, B. E. H. and Ashraf, S. H. (2017). Impact of balanced scorecard usage on the organizational performance: A case study of Jordan international insurance. *International Research Journal of India*, 2(5): 1-9.
- Kaplan and Norton, D. P. (1992). The balanced scorecard-measures that drive performance. *Harvard Business Review*, 1(70): 71-79.
- Kaplan and Norton, D. P. (1996). *Balanced Scorecard: Translating Strategy into Action*. Harvard Business School, Press. 51.
- Kaplan and Atkinson, A. A. (1998). *Advanced management accounting*. 3th edn: Prentice-Hall: New Jersey.
- Kaplan and Norton, D. (2004). Measuring the strategic readiness of intangible assets. *Harvard Business Review*, 82(2): 52-63.
- Khanka, S. S. (2012). *Balanced scorecard in corporate India: From philosophy to practice*. The Chartered Accountant.
- Messier, W. F. (1997). *Auditing. A systematic approach*. McGraw-Hill.
- Mooraj, S., Oyon, D. and Hostettler, D. (2009). The balanced scorecard: A necessary good or an unnecessary evil? *European Management Journal*, 17(5): 481-91.
- Niven, P. (2006). *Balanced scorecard step by step for government and non-profit agencies*. John Wiley and Sons: New York.
- Northcott (2011). Using the balanced scorecard to manage performance in public sector organizations-issues and challenges. *International Journal of Public Sector Management*, 25(3): 166-91.
- Ombuna, D. S. (2013). Impact of balanced scorecard usage on the performance of commercial banks. *International Journal of Information Technology and Business Management*, 10(1): 40-45.
- Phillips, P. A. and Louvieris, P. (2005). Performance measurement systems in tourism, hospitality and leisure small-medium sized enterprises: A balanced scorecard perspective. *Journal of Travel Research*, 44(2): 201-11.
- Rillyan, N. R., Satria, G., Raihan, A. M. and ibisono, D., 2016. "A study on linkages among balanced scorecard perspectives: The case of Indonesian local banks." In *First International Conference on Advanced Business and Social Sciences (ICABSS)*. Bali: Asia Pacific Institute of Advanced Research (APIAR). pp. 132-43.
- Thomas, R., Gable, M. and Dickinson, R. (2014). An application of the balanced scorecard in retailing. *The International Review of Retail, Distribution and Consumer Research*, 9(1): 41-67.
- Umar, G. and Olatunde, O. J. (2011). Performance evaluation of consolidated banks in Nigeria by using non-financial measures. *Interdisciplinary Journal of Research in Business*, 1(19): 72-83.
- Wu, H. Y., Tzeng, G. H. and Chen, Y. H. (2009). A fuzzy mcdm approach for evaluating banking performance based on balanced scorecard. *Expert Systems with Applications*, 36(6): 10135-47.