

# The Effect of Adopting Balanced Scorecard (BSC) as Strategic Planning Tool on Financial Performance of Banks Operating in Palestine

Mohammad Nader Turshan<sup>1</sup> & Naser Abdel Karim<sup>2</sup>

<sup>1</sup> Ramallah, Palestine

<sup>2</sup> Arab American University, Palestine

Correspondence: Mohammad Nader Turshan. E-mail: moh\_tu1989@hotmail.com

Received: October 23, 2019

Accepted: December 11, 2019

Online Published: December 31, 2019

doi:10.5539/ass.v16n1p95

URL: <https://doi.org/10.5539/ass.v16n1p95>

## Abstract

This research investigates the effect of BSC on the financial performance of banks operating in Palestine, across BSC's four perspectives: financial; customers; internal business processes; innovation, growth and learning. It seeks to identify the relationship between BSC and the financial performance of banks operating in Palestine.

For this purpose, the research population comprises all 14 banks operating in Palestine. As a result of the small size of the population, the 'complete census' method has been used: the sample is the whole population. The questionnaire was distributed to 130 respondents (employees) at banks: branch managers, heads of departments, directors of departments and financial controllers. Financial performance was used as a dependent variable, while the following four independent variables served as hypothesized determinants: (i) financial perspective, (ii) customers' perspective, (iii) internal business processes perspective, and (iv) innovation, growth and learning perspective. The Multiple Linear Regression test at 95% confidence was used, resulting in three significant variables: financial perspective; internal business processes perspective; and innovation, growth and learning perspective. Overall, the adjusted  $R^2 = 0.62$ . This measure is acceptable, and reveals that the resulting model interprets 62% of the determinants of financial performance.

The most important results of this study are: (1) the BSC model can be used to enhance the financial performance of banks operating in Palestine, and (2) the customers' perspective in the BSC model did not have the same effect as other perspectives. Moreover, (3) in their measurement of performance, banks operating in Palestine apply clear strategic performance measures, including traditional financial and non-financial measures, while noting that their use of these measures does not mean that they apply them under the remit of a BSC model. These measures can be reclassified within the four perspectives of the BSC model.

The main recommendations are that (1) banks operating in Palestine should implement BSC as an integrated system for strategic management, and as a means for decision-making by management. Its application achieves many advantages that enhance the competitive position and financial performance of banks. Furthermore, (2) banks operating in Palestine need to pay more attention to strategy, and measurements that are included in the customers' perspective of BSC. There is also a need to (3) conduct training courses for bank employees on BSC and how it can be used. Finally, there is a need to (4) conduct further investigation of the effect of adopting BSC as a strategic planning tool on the financial performance of banks operating in Palestine, as well as (5) a study of the effect of BSC when taking into consideration the type of bank - Islamic or commercial, local or foreign.

**Keywords:** Balanced Scorecard (BSC), financial performance, Palestine banking sector, strategic planning tool

## 1. Introduction

### 1.1 General Overview

Institutions seek to make changes to their policies and practices in order to realize a transition to an improved future situation. This transition requires strategic and administrative procedures and tools, as well as the ability to measure work outcomes based on pre-identified indicators that can guide this process of monitoring and evaluation.

Profound changes have occurred in the business environment: the globalization of markets through the liberalization of world trade, rapid technological developments and an increasing number of organizational mergers through acquisition, or by way of strategic alliances. Therefore, it has become extremely important for institutions to adopt strategic tools that take into consideration factors that can potentially impact their positioning and performance.

For decades, measuring and evaluating the performance of institutions was limited to financial results only. However, this is not an indicator of whether an institution is fulfilling its vision, mission and strategic objectives. This has prompted institutions to employ a clear methodological process for measuring the performance of both financial - and non-financial - outcomes.

In the early 1990s, a new approach for performance evaluation, called Balanced Scorecard (BSC) by Kaplan and Norton, emerged as a distinctive technique that takes into consideration the balance between financial results and growth engines; and the balance between technique and strategy. In 1996, Kaplan and Norton introduced a BSC model comprising four dimensions: (i) financial, (ii) internal business processes, (iii) learning and growth, and (iv) customers.

BSC is a balanced thinking approach, and an operational tool enabling institutions to adopt strategic objectives that assess operational, financial and strategic performance according to an integrated framework of financial and non-financial standards. This balanced approach provides comprehensive information on the institution's performance.

The banking sector was chosen for the study because it is considered one of the most regulated and controlled sectors in Palestine. Additionally, the banking sector is important to economic development, where this sector's performance is considered to be the most important indicator of the strength of the economy and its performance. In the Palestinian context, there is growing diversity in the banking sector, which includes both local and foreign banks, as well as commercial and Islamic banks. There are also a large number of lending institutions that are the main competitors of banks operating in Palestine.

The remaining parts of Section 1. Introduction outline the problem statement, study objectives, contributions and significance of the study and finally the study hypotheses. Section 2. Material Studied covers the conceptual framework, previous researches and studies and provides an overview of the Palestinian banking sector. Section 3. Theoretical Framework outlines the study methodology, population and sampling, data collection techniques, study design and issues of reliability and validity. This is followed by Section 4. Data Analysis and Findings, containing preliminary statistical tests, descriptive statistics, multiple regression analysis, regression results. The paper concludes with Section 5. Study Conclusions and Recommendations.

### *1.2 Problem Statement*

The performance of the Palestinian banking sector has fluctuated during the past five years: The Association of Banks in Palestine (ABP) indicates that the sector's net profits declined by about 9% in 2015 compared to 2014, but then realized annual growth rates of 12% (2015-16) and 13% (2016-17) while 5.1 % (2017-18). In addition, In the past few years the number of banks operating in Palestine reached to 14 banks now, this has created a competitive environment in the banking sector.

The fundamental research question is borne out of this reality. The problem that this study focuses on whether banks operating in Palestine have adopted clear strategic tools that contribute to enhancing their financial performance in this unstable and competitive environment; while examining the impact of BSC utilization on the enhancement of the financial performance of banks operating in Palestine. Few studies have addressed this issue: the impact of BSC on the financial stability of banks operating in Palestine

### *1.3 Study Objectives*

This research aims at investigate the effect of BSC on the financial performance of banks operating in Palestine, across BSC's four domains: financial, customers, internal business processes, growth and learning. It seeks to identify the relationship between BSC and the financial performance of banks operating in Palestine.

The study also aims to identify the components and dimensions of the dependent variable: financial performance, as well as setting standards for its measurement. Finally, the study identifies strategic criteria across BSC's four domains (financial, customers, internal business processes, growth and learning) that, when applied, enhance the financial performance of banks operating in Palestine.

### *1.4 Contributions and Significance of the Study*

Research findings are expected to provide value to different parties, but primarily to banks operating in Palestine.

These will benefit from research findings on BSC's impact on the financial performance of banks operating in Palestine. Secondly, management at these banks may choose to use BSC to improve their financial performance. Finally, the results of the study may encourage banks that do not use BSC to adopt it, as part of their processes for future planning and enhancing financial performance.

This study adds value to the financial literature on the Palestinian and international banking sectors. The important value of this research is its uniqueness when compared to other studies, given the current absence of research on BSC application in the Palestine, covering both theoretical frameworks and practical applications

### *1.5 The Study Hypotheses*

Based on the study main question, and all the previous studies, the study has one main hypothesis and four sub-hypotheses, as follow:

- **Main Hypothesis:** To determine the effect of adopting BSC as strategic planning tool on financial performance at banks operating in Palestine.

**H<sub>0</sub>:** There is no statistically-significant relationship between adopting Balanced Scorecard (BSC) within its four perspectives, and financial performance at banks operating in Palestine.

**H<sub>1</sub>:** There is a statistically-significant relationship between adopting Balanced Scorecard (BSC) within its four perspectives, and financial performance at banks operating in Palestine.

- **Sub-Hypotheses:** to examine the correlation between the four main variables in research design and financial performance.

**H<sub>1-1</sub>:** There is a statistically-significant relationship between adopting Balanced Scorecard (BSC) within financial perspectives, and financial performance at banks operating in Palestine.

**H<sub>1-2</sub>:** There is a statistically-significant relationship between adopting Balanced Scorecard (BSC) within customer perspective, and financial performance at banks operating in Palestine.

**H<sub>1-3</sub>:** There is a statistically-significant relationship between adopting Balanced Scorecard (BSC) within internal business process perspective, and financial performance at banks operating in Palestine.

**H<sub>1-4</sub>:** There is a statistically-significant relationship between adopting Balanced Scorecard (BSC) within innovation, learning and growth perspective, and financial performance at banks operating in Palestine.

## **2. Material Studied**

Previous research on BSC shows the importance of applying it at business organizations, given its impact on performance, in terms of accuracy, timeliness and integration with management systems and the degree of detail that characterizes them. This chapter looks at the most common theories on the structure of balanced scorecards (BSC), as well as the rules and elements that should be available for using the balanced scorecard. Moreover, a comprehensive review of previous studies is conducted finally Palestine banking sector overview.

### *2.1 Conceptual Framework*

The BSC model is defined as “a tool used to transfer and communicate the strategy of the enterprise to different units and levels of management, as well as to measure the implementation plans of these units. The use of these models ensures that the targeted results are achieved, thus supporting the strength of the enterprise and its competitive position.” (Keith & Gering, 2000).

Norton and Kaplan (1992) define BSC as a “comprehensive performance measurement system from a strategic perspective, translating business strategy into strategic objectives, benchmarks, target values, and clear introductory procedural steps.”

BSC includes a variety of performance measurements related to four dimensions: financial, customers, internal business processes, learning and growth. (Kaplan & Norton, 1992) BSC includes a set of financial and non-financial. However, the basis for designing that model is that financial and non-financial measures should be part of the information system at different administrative levels.

For the successful implementation of a BSC model, the following basic requirements must be met (Abdel Aziz, 2003):

1. A clear definition of strategic objectives: Because the definition of strategic objectives is the main focus of the use of the (BSC) model.
2. Following system approach: the successful use of the BSC model depends on the use of the system input, that is, a full integration of the four aspects of the BSC model into an integrated system.

3. The existence of motivation to choose balanced performance measures that is necessary to respond to environmental changes and pressures that enterprises face such as the intensity of competition and focus on the client.

Pim (1997) points out that there are a number of rules - called the Golden Rules - for the basic implementation of the BSC model. as outlined below:

1. The need to strengthen senior management in applying BSC standards and communicating its requirements clearly to all of the staff.
2. It should be recognized that there is no uniform BSC model (solution) for all organizations, given different environmental (internal and external) factors that influence organizations.
3. It should be recognized that the identification and understanding of an organization's strategy is the starting point for the development of a tailored BSC model. Once the strategic requirements for an organization's success are identified, a set of interventions that are consistent with the strategy are set.
4. The impact of performance indicators on employees' behavior should be understood.
5. It is important to recognize the difficulty of quantifying all performance indicators – it is important to note that there are quantitative and qualitative indicators.
6. A limited number of goals and interventions must be identified that correspond to the unique features of each organization.
7. The need to recognize the accuracy and simplicity of information transfer systems from the outset, so as not to transfer false information to end users of the system.

## 2.2 Previous Researches and Studies

In this section, the study will explain the previous related studies, results, and conclusions. The previous studies include many countries in different banking sectors, as follow:

Study (Yılmaz & Nuri, 2018), entitled: “Assessment of Turkish Banks’ Sustainability Performance using TOPSIS Method and Balanced Scorecard Approach”.

Using a qualitative research approach encompassing intersected sustainability and BSC dimensions, a model was evaluated using the TOPSIS method, an effective technique to resolve multi-dimensional decision-making chores. The study concluded that the starting point for performance sustainability is the traceability of sustainability activities, in terms of indicators. Moreover, differences emerged in created performance report card models. The indicators cited in this model are similar to those at banks. Indicators’ differentiation results in changes in the performance order.

Study (Kerazan, 2018), entitled: “The Impact of Corporate Governance on the Performance Level of Jordanian Public Joint-Stock Industrial Companies using BSC”.

A questionnaire was distributed to financial managers working at public, joint-stock, industrial companies listed on the Amman Financial Market in Jordan. A total of 66 questionnaires were distributed, of which 50 were returned (75.75% response rate). The study’s results statistically demonstrated the significant impact of effective corporate governance frameworks on company performance levels, through using BSC. Moreover, the study also statistically demonstrated that equity and ownership of property rights has a significant impact on company performance level, again through using BSC. The studies recommend that public, joint-stock, industrial companies should adopt an effective framework for corporate governance, given its impact on performance. Moreover, increasing transparency in the disclosure of financial statements and utilizing resources optimally helps to develop appropriate corporate governance frameworks and boost employees’ performance.

Study (Dan, 2017), entitled: “Assessment of the Performance of Companies in India using BSC”.

Following a literature review, the study included the distribution of the questionnaires to 66 companies: 30 listed to the Bombay Stock Exchange in India, 22 companies from the healthcare sector and 14 companies from the FMCG sector. Additionally, data was obtained and tabulated from the Ministry of Company Affairs in India. The study revealed that there is a serious gap in framing BSC in a logical way, where it is applied in a haphazard, random fashion. Moreover, the study identified a difference between individual scores for BSC perspectives and Likert-scale scores. The study recommended the adoption of non-financial indicators in order to gain further competitive advantage.

Study (Madhoun & Batniji, 2013), entitled: “Strategic Planning using a Balanced Scorecard - an Empirical Study on the Center for Community Training and Crisis Management - Gaza”.

The aim of this study is to determine the degree to which strategic planning is practiced at the Center for Community Training and Crisis Management in Gaza, and the extent to which the dimensions of BSC are used in strategic planning processes. The study examined the suitability of BSC dimensions for the Center's work environment, and presented a proposed scenario for preparing a strategic plan using BSC criteria.

The study reached many results, the most important of which are: (i) that BSC and its dimensions are used in strategic planning processes at the Center (total score of (78.4%), (ii) the section that fit the dimensions of BSC for the Center's work environment have obtained a high degree of approval (75%) of the average responses of the sample members. The most important recommendations of the study are the need to increase attention to the 'growth and learning' dimension for employees at the Center; and the need to strengthen BSC components in order to achieve objectives.

Study (Awad, 2009), entitled: "The Effect of Linking and Integrating the Balanced Scorecard (BSC) and Activity Based Costing System (ABC) on the Performance of Palestinian Banks: An Empirical Study of the Bank of Palestine".

The objective of this study is to demonstrate the effect of linking and integrating the ABC system with BSC on the performance of Palestinian banks.

The most important findings of the study are: (1) The use of financial and operational information for ABC and balanced scorecard results indicates an effective complementarity between the two systems. (2) The integration of the Activity Based Costing System (ABC) and the balanced scorecard provided an integrated framework for the concept of cost management system, which aims to identify the Bank's cost structure while attempting to use cost reduction techniques to minimize acceptable profit rates. (3) Accurate translation of the Bank of Palestine strategy on the basis of the four dimensions of the balanced scorecard is divided into targets and performance measures, which are fed from the results of the Activity Based Costing System (ABC) implemented, which reduces the cost structure of each Service (financial dimension), the introduction of new banking services (internal operations dimension), increasing customer satisfaction (client dimension), and attention to developing the strategic skills of the employees (learning and growth dimension). The study concluded several recommendations, the most important of which are: (1) the need to develop cost systems and administrative accounting in Palestinian banks to provide the necessary data to support the competitiveness of banks in the modern business environment (2) The need for further applied studies on the integration of the balanced performance measure and the tools of modern management accounting and its impact on performance.

Study (AL Shaikh Ali, 2007), entitled: "Performance Evaluation of Palestinian Telecommunications' Corporations by using Balanced Scorecard Approach".

The aim of this study is to evaluate the performance of Jawwal and the Palestine Telecommunications Company (Paltel) in light of the four BSC dimensions, as assessed by employees and shareholders at these two companies, and to propose solutions and recommendations for the problems related to the performance of the two companies. The most important results of the study are: (i) there is a strong positive correlation between the degree of each BSC dimension and the total score of the card; (ii) most employees and shareholders of the two companies assess performance based on financial and customer-related issues equally, and this is consistent with the visions and the main objectives of both companies, (iii) most employees and shareholders have different estimations of the performance of the two companies in the areas of internal operations and growth and development, (iv) staff with higher educational qualifications expect the two companies to have better educational activities. The study concluded with several recommendations, the most important of which are the following: (i) the need to improve and develop training programs and internal operating processes, and (ii) the necessity of carrying out mobilization and communication activities to ensure the support of both internal and external stakeholders.

Study (Abdul Latif & Turkman, 2006), entitled: "Balanced Scorecard as a Performance Measurement Tool".

The objective of this study is to introduce BSC techniques in the development of a new performance evaluation system that combines financial and non-financial standards (operations), clarifying the basic idea of BSC and how to build it.

The most important results of the study are: (i) BSC is a modern strategic tool for measuring and evaluating performance in a comprehensive manner, including financial and non-financial measurements, covering important dimensions of the organization's performance, (ii) BSC works to translate the organization's strategy into operational actions, taking into account the three-time dimensions of yesterday, today, and tomorrow. The study reached several recommendations, the most important of which are (i) the need to use the card to measure balanced performance in businesses and public-service organizations such as hospitals and governmental

departments, (ii) the need to use BSC in both private and public sectors, taking into account the nature and circumstances of each, (iii) the need for an effective, computer-based, information system to increase the effectiveness of this technology.

Study (Ghaith, 2005), entitled: “The Importance of using Non-Financial Performance Measures to Increase the Effectiveness of Management Accounting in the Modern Industrial Environment: A Field Study on Saudi Industrial Enterprises in the city of Jeddah”

This study aims to highlight the importance of using modern models for measuring performance, in order to increase the effectiveness of management accounting in performance evaluation. The most important findings of the study are: (i) insufficient traditional financial performance measures, which are needed by organizations, (ii) the effectiveness of the role of management accounting in performance appraisal is only achieved through the integration of financial and non-financial performance measures, (iii) some organizations are not interested in the development of performance appraisal systems, due to the time and effort required to develop such systems, the lack of a necessary database, and the lack of qualified expertise, (iv) organizations lack awareness of the importance of using non-financial performance measures associated with research and development, (v) lack of awareness on the importance of modern administrative and accounting philosophies, such as: BSC, best comparison model, and accounting models. The study concluded with several recommendations, the most important of which are: (i) the need for constant attention to the evaluation of the performance of organizations through financial and non-financial performance measures, that focus on the causes and drivers of financial performance in the short and long term, (ii) conducting many courses and seminars on the role of financial and non-financial performance measures in achieving objectives, (iii) the need to convince the owners of organizations, accountants and cost accountants to develop performance appraisal systems, in line with developments in the modern manufacturing sector.

### *2.3 Palestine Banking Sector Overview*

The Palestinian Monetary Authority (PMA) was established after the signing of the Paris Protocol agreement on trade relations between the Palestinian National Authority (PA) and Israel in 1994. PMA is responsible for implementing monetary policies and regulating the banking sector in Palestine.

Currently, there are fourteen banks operating in Palestine, of which seven are local banks and seven are foreign banks (six Jordanian banks and one Egyptian bank). These fourteen banks are divided into eleven commercial banks and three Islamic banks. At the end of 2018, the sector employed 7,209 staff, distributed across 351 banking offices/branches.

As for the financial position of the banks operating in Palestine, its total assets amounted to about USD 16.2 billion (EO 2018). Direct facilities (loans) constitute the largest share of the sector's total assets, at about 52%. As for Total liabilities without banks equity, these reached about USD 14.3 billion (EO 2018), where customer deposits accounted for the bulk of these liabilities without banks equity (up to 92%). The banking sector's total equity reached about USD 1.9 billion (EO 2018).

Regarding the financial performance of the banks operating in Palestine, net revenues amounted to about USD 699 million (EO 2018), mostly in the form of income from interest. Total expenses (without tax expenses) amounted to about USD 478 million (EO 2018). Net profits reached about USD 179 million dollars (EO 2018).

Concerning financial indicators, profitability indicators are the most important. Return on assets (ROA) for the banks operating in Palestine was around 1.5%, while return on equity (ROE) reached about 15.3% (EO 2018). As for liquidity indicators, the ratio of total customers' deposits to total assets stood at around 76%, while the ratio of net credit direct facilities to total assets amounted to about 52%. As for the capital structure of banks operating in Palestine, the ratio of total owners' equity to total assets reached 10% (EO 2018). The ratio of retained earnings to total owners' equity amounted to 7.8% (EO 2018).

## **3. Theoretical Framework**

This chapter covers the research methodology, Questionnaire design and the Population and sample size that will try to answer the research question and test the research hypotheses related to balanced scorecard and the effect on bank financial performance.

### *3.1 The Study Methodology*

This study examines the potential impact of adopting the Balance Scorecard (BSC) Model in enhancing the financial performance of banks operating in Palestine. It employs an applied research method, which ensures that the strategic performance measures of banks operating in Palestine are utilized, even if these banks do not use

BSC or its four dimensions. Various sources of information are utilized in the research process, including: available literature, journals, and previous studies using BSC models. Gathered data was then used to develop the theoretical framework, identify variables and formulate hypotheses. Moreover, statistical data was collected via a questionnaire designed for this purpose, covering most of the study’s variables.

### 3.2 Population and Sampling

For the purpose of this study, the research population comprises all 14 banks operating in Palestine, as shown in Table 1. Because of the small size of the population, the method follows the complete census of these banks (the sample is the whole population). The questionnaire was designed and distributed to 130 respondents: (branch manager, head of department, director of department, financial controller). The response rate reached 94.6%, i.e., 123 questionnaires.

Table 1. Study sample

#	Bank Name	Bank Type	Bank Nationality	Number of questionnaires distributed	Number of questionnaires returned
1	Palestine Islamic Bank.	Islamic	Local	8	8
2	Arab Islamic Bank.	Islamic	Local	10	8
3	Al Quds Bank	Commercial	Local	15	15
4	Arab Bank	Commercial	Foreign	15	15
5	Bank of Palestine	Commercial	Local	15	15
6	Palestine Investment Bank	Commercial	Local	7	7
7	The National Bank	Commercial	Local	15	15
8	Al Safa Bank	Islamic	Foreign	6	6
9	Cairo Amman Bank	Commercial	Foreign	10	9
10	Bank of Jordan	Commercial	Foreign	9	9
11	The Housing Bank for Trade and Finance	Commercial	Foreign	5	5
12	Jordan Ahli Bank	Commercial	Foreign	5	5
13	Egyptian Arab Land Bank	Commercial	Foreign	5	4
14	Jordan Commercial Bank	Commercial	Foreign	5	2

### 3.3 Data Collection Techniques

In order to collect data from the sample, we designed a questionnaire that consists of two parts. The first part consists of six questions related to general information about the person filling out the questionnaire, covering academic qualifications, specialization, job title, practical experience, training courses completed, and the type of bank where she/he works. The second part of the questionnaire includes (44) questions regarding the strategic measures that are supposed to be available for the purpose of enhancing the financial performance of banks operating in Palestine. In this part, a five-point Likert scale is used in the correction of questionnaire's paragraphs

### 3.4 Study Design

The study depended on a research model, which includes four main variables influencing on the financial performance:

1. Performance measures on the financial side.
2. Performance measures on the customer’s side.
3. Performance measures on the internal business processes side
4. Performance measures on the growth and learning side.

Based on that we identified the following model as an equation that can be used to predict the value of the dependent variable, after determining the values of independent variable coefficients using the multiple regression model:

$$Y = \beta_0 \pm \beta_1(\text{FS}) \pm \beta_2(\text{CS}) \pm \beta_3(\text{IBPS}) \pm \beta_4(\text{GLS}) \pm e_i$$

Since:

Y: Financial performance of banks operating in Palestine.

FS: Performance measures on the financial side.

CS: Performance measures on the customer’s side.

IBPS: Performance measures on the internal business processes side.

GLS: Performance measures on the growth and learning side.

$\beta_0$ : Represents the constant parameter, which is the fraction of the vertical or y-axis, and is equal to a value of the dependent variable, if the effect of combined independent variables is equal to, or close to zero.

$\beta$ : It represents the slope of the independent variable

### 3.5 Issues of Reliability and Validity

Since this study is an applied research, we met with a group of professors and specialists in the financial and administrative sciences to evaluate the validity of the questionnaire and determine its validity as a measuring tool before using it in the study in order to reach a high level of dissemination of its results. After the questionnaire was modified based on the opinion of the arbitrators, and prior to their distribution to the study sample, it was confirmed by conducting a preliminary sample survey in which the questionnaire was distributed to a suitable sample that constituted 20% of the original sample. We examined the respondents' understanding of the questions and indications Its answer and its connection to the dimensions and measures studied, and also simplify and clarify the standards used in the questionnaire to achieve the maximum degree of credibility possible.

The reliability of the questionnaire was checked by the test of internal consistency and calculates the extraction reliability coefficient (Cronbach's alpha) for each section and for whole questionnaire, where the reliability coefficient for whole questionnaire is equal (0.871), which is a very good reliability coefficient for researches. It is clear in the table below that the reliability coefficient of all sections is acceptable and meets the objectives of the study.

The structural validity was checked by measuring the Pearson correlation between each section of the questionnaire and the total degree of it. The results showed that all correlations are statistically significant with P-values less than  $\alpha=0.05$ . This indicates that there is a high internal consistency between paragraphs in the questionnaire and instrument to measure what is intended to measure.

## 4. Data Analysis and Findings

### 4.1 Preliminary Statistical Tests

- Data Normality Test

This section tackles the issue of data normality of the dependent factor, based on obtained observations. Data was analyzed with SPSS, using the K-Smirnov Normality test. According to Keller (2005), data distribution is considered normal if the P-value (sig) of the data was greater than  $\alpha$ . Based on Table (2) below, the data’s sig. is almost zero, according to the K-Smirnov Test. Therefore, the data is not normally distributed. This fact enables us to claim that the Pearson correlation test is not enough to interpret the relationship between researched variables, since one important criteria to use is the normality of data (Amemiya, 1985).

Table 2. Tests of Normality

	Tests of Normality					
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Financial	.277	123	.000	.825	123	.000
Customer	.228	123	.000	.887	123	.000
Internal Business Process	.293	123	.000	.826	123	.000
Innovation Learning Growth	.262	123	.000	.849	123	.000

a. Lilliefors Significance Correction

- Multicollinearity Test

Multicollinearity situation arises when some independent variables are dependent on each other, or are highly correlated (Walker & Maddan, 2009).

The degree of correlation-coefficient between independent variables was tested to determine the degree of correlation between them, where it was found that there is a correlation between independent variables, but not a significant one. To ensure the stability of the correlation-coefficient of these variables, we calculated the



correlation-coefficient using Variable Inflation Factor (VIF) test. Table 3 shows that there is no value indicating a Multicollinearity problem. Therefore, the results of the multiple regression model are not due to an interrelation between independent variables. This shows the reliability of the results of regression analysis

Table 3. Coefficients Table

Model	Coefficients <sup>a</sup>						
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.660	.240		2.751	.007		
1 Financial Perspective	.221	.060	.267	3.674	.000	.591	1.693
Customer Perspective	-.054	.087	-.061	-.623	.535	.325	3.075
Internal Business Perspective	.374	.069	.441	5.403	.000	.467	2.139
Innovation, Learning and Growth Perspective	.295	.067	.322	4.388	.000	.579	1.728

a. Dependent Variable: Financial performance

4.2 Descriptive Statistics

Table 4 below provides an overall picture of the components of the study’s variables. The table depicts the mean, standard deviation, maximum and minimum values for each category of variables, after data processing based on the full sample.

Table 4. Descriptive Statistics

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
Financial performance	123	3.62	4.77	4.0269	.13647
Financial Perspective	123	3.60	4.90	4.0325	.16471
Customer Perspective	123	3.63	4.63	4.0173	.15378
Internal Business Process Perspective	123	3.71	4.86	4.0348	.16086
Innovation Learning and Growth Perspective	123	3.67	4.67	4.0176	.14909
Valid N (listwise)	123				

Table 5 below provides an overall picture of the components of the depend variables. And complete set of measurement items that used in measure depend variables.

Table 5. Complete set of measurement items

Depend variables aspect	Sentence	Mean
Increase operating profit margin	The resources and possibilities available are being leveraged with mechanisms that make profits above the familiar level.	3.98
	Tools are used to determine the operating profit margin optimization factors and then improve it.	4.02
Continuity and sustainability of improvement	The Bank's operations are designed to be flexible enough to achieve the desired objectives.	4.02
	The Bank's continuous improvement processes include working mechanisms and banking services.	4.02
Optimal use of assets	Working capital reduction process aims to improve asset utilization mechanisms.	4
	New works are being created to use scarce resources more effectively; to exploit existing assets at full capacity.	4.05
	Improvement of capital investment procedures is being undertaken to increase production capacity and accelerate investment operations.	4.02
Enhancing efficiency and sustainability	Effective measures to achieve the highest level of value generated by the available level of resources are taken.	4.04
	The highest level of customer needs is met through the production of appropriate products.	4.05

Change in debt policy, capital structure policy	Balance between the two sides of the capital structure is achieved; to achieve the highest value-added in the share price.	4.05
Increase and sustain free cash flow	Take effective action; to increase and sustain future free cash flow by increasing net operating profit.	4.04
Balance between future financial return and risk	Efforts are being made to achieve a balance between the desired future financial return and the potential for undesired results.	4.04
Achieve and sustain competitive advantage	There is a full recognition of the importance of value-added as a key factor in maintaining an effective competitive edge.	4.01

### 4.3 Multiple Regression Analysis

This test is conducted to see if the multiple regression model, chosen as the framework for analysis, is an appropriate model, using F-Fisher distribution. The percentage used in the judgment is 5%. Accordingly, one of the following hypotheses will be rejected:

H0: The model is inappropriate, that is, there is no effect of independent variables on the dependent variable.

H1: The model is appropriate, that is, there is an effect of independent variables on the dependent variable.

Where, the basis of the decision will depend on the output of statistical analysis as follows:

- If (Sig.F) > 5%, then accept H0
- If (Sig.F) < 5%, then accept H1

Table (6) shows that the value of Sig. F equals (0.000), which is less than 5%. This means accepting H1 and rejecting H0. It also means that the multiple regression model used for analysis is appropriate: there is a statistically significant effect in the application of BSC model on enhancing the financial performance of banks operating in Palestine.

Table 6. ANOVA Table

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.437	4	.359	50.791	.000 <sup>b</sup>
	Residual	.835	118	.007		
	Total	2.272	122			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Innovation Learning and Growth Perspective, Financial Perspective, Internal Business Process Perspective, Customer Perspective

### 4.4 Regression Results

The following table depicts the relationships between dependent and the independent variables based on P-value. Again, we should recall that regression was conducted based on 95% level of confidence. Accordingly, any independent variable that has a Sig value below 0.05 is considered significant, and vice versa.

Table 7. Coefficients Table

Coefficients <sup>a</sup>								
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
(Constant)	.660	.240		2.751	.007			
Financial Perspective	.221	.060	.267	3.674	.000	.591	1.693	
Customer Perspective	-.054	.087	-.061	-.623	.535	.325	3.075	
1 Internal Business Process Perspective	.374	.069	.441	5.403	.000	.467	2.139	
Innovation Learning and Growth Perspective	.295	.067	.322	4.388	.000	.579	1.728	

a. Dependent Variable: Financial performance

From Table 7 above, and based on P-value criteria, we conclude the following:

- Significant Variables: Financial Perspective, Internal Business Process Perspective, Innovation Learning and Growth Perspective
- Insignificant Variables: Customer Perspective

Table 8 provide an indication of the strength of the relationship between all variables, and financial performance. R (the correlation coefficient) = 0.795, indicating a strong relationship since it is greater than 0.75. (Bryman & Bell, 2007) R2 (coefficient of determination) = 0.633. Adjusted R2 indicates that 62% of the variation in financial performance is determined by 3 significant variables (financial perspective; internal business process perspective; innovation, learning and growth perspective). This value supports the explanatory model based on F-test sig. value in ANOVA table.

Table 8. Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.795 <sup>a</sup>	.633	.620	.08411

a. Predictors: (Constant), Innovation Learning and Growth Perspective, Financial Perspective, Internal Business Process Perspective, Customer Perspective

At the beginning of this research, a hypothesized model was developed to include four variables that other researchers found significant to financial performance, as follows.

$$Y = \beta_0 \pm \beta_1(\text{FS}) \pm \beta_2(\text{CS}) \pm \beta_3(\text{IBPS}) \pm \beta_4(\text{GLS}) \pm e_i$$

After analyzing the data, the following results are obtained based on coefficients in Table (11) and Table (9) model summary.

**Financial Performance** = 0.66 + (0.221 \* Financial Perspective) – (0.54 \* Customer Perspective) + (0.374 \* Internal Business Process Perspective) + (0.295 \* Innovation Learning and Growth Perspective)

From this model, we note a positive impact of financial perspective, internal business process perspective and innovation, learning and growth perspective. The customers’ perspective has a negative impact.

Based on previous analysis and the acceptance or rejection of the null hypotheses, the results of the study hypothesis test are summarized in Table 9.

Table 9. Summary of Hypothesis Testing

Research Hypotheses	Hypotheses	Testing Results
Main hypothesis	There is a statistically-significant relationship between adopting Balanced Scorecard (BSC) within its four perspectives, and financial performance at banks operating in Palestine.	Accept
First sub-hypothesis	There is a statistically-significant relationship between adopting Balanced Scorecard (BSC) within financial perspective, and financial performance at banks operating in Palestine.	Accept
Second sub-hypothesis	There is a statistically-significant relationship between adopting Balanced Scorecard (BSC) within customers’ perspective, and financial performance at banks operating in Palestine.	Reject
Third sub-hypothesis	There is a statistically-significant relationship between adopting Balanced Scorecard (BSC) within internal business process perspective, and financial performance at banks operating in Palestine.	Accept
Fourth sub-hypothesis	There is a statistically-significant relationship between adopting Balanced Scorecard (BSC) within innovation, learning and growth perspective, and financial performance at banks operating in Palestine.	Accept

### 5. Study Conclusion & Recommendation

This is the final section of the study, which includes: the study conclusion results, and the recommendation for the interested people and researchers.

#### 5.1 Conclusion

- BSC model can be used to enhance the financial performance of banks operating in Palestine.
- In their measurement of performance, banks operating in Palestine apply clear strategic performance measures, including traditional financial and non-financial measures, while noting that their use of these measures does not mean that they apply them under the title of a BSC model. In return, these measures can

be reclassified within the four aspects of the BSC model: financial perspective, customer perspective, internal business process perspective, innovation, learning and growth perspective.

- Customer perspective the in BSC model did not appear to have an effect in the Palestinian case, unlike other BSC perspectives.
- Banks operating in Palestine use and apply financial objectives, measures and indicators for evaluating financial performance (high importance). The most important measures used are Return on Investment (ROI), Return on Assets (ROA) and Net Profit Margin.
- Banks operating in Palestine use and apply internal business process objectives, measures, and indicators for evaluating financial performance (moderate importance). The most important indicators are 'identify/create market' and 'profitability by product/service'.
- Banks operating in Palestine use and apply innovation, learning and growth objectives, measures and indicators for evaluating financial performance (high importance). The most important indicators are 'improved employee capabilities', 'employee satisfaction' and 'number of a training course attended by employees'.
- Banks operating in Palestine use and apply customer objectives, measures and indicators for the evaluation of financial performance (low importance).

### 5.2 Recommendation

- The banks operating in Palestine should implement the Balanced Scorecard model within four dimensions as an integrated system, for strategic management, and a means for decision-making by managements, this is because its application achieves many advantages that enhance the competitive position and financial performance of banks.
- Banks operating in Palestine should use the BSC model as a tool to evaluate performance, as it helps to organize administrative processes and lends focus to the application of institutional strategy.
- Conduct training courses for banks employees on the BSC model and how it can be used.
- Banks operating in Palestine need to pay more attention to strategy, and measurements that are included in the customers' perspective in BSC.
- Banks operating in Palestine also need to take into consideration the need to develop products/services that fulfill their customers' needs, while linking this to customers' perspective in BSC.
- Developing of indicators for measuring customer satisfaction in the customers' perspective in BSC.
- Conducting the further investigation of more determinants of the effect of adopting Balanced Scorecard (BSC) as a strategic planning tool on the financial performance of banks operating in Palestine; as well a study of the effect of BSC when taking into consideration the type of bank - Islamic or commercial and local and foreign
- Applying this research model to Islamic banks and commercial ones, and then comparing the results.

### References

- Abdul Aziz, S. M. (2003). Proposed framework for the use of balanced performance measures in Non-governmental organizations applying to NGOs. *Egyptian Journal of Business Studies*, 27(3), 241. <https://doi.org/10.12691/jbms-3-5-1>.
- Abu Fadda, M. M. (2006). *Towards the development of a balanced system for measuring strategic performance in Islamic Banking Institutions* (Unpublished doctoral thesis, Arab Academy for Science Finance and Banking, Amman, Jordan).
- AL Shaikh Ali, M. (2007). *Performance Evaluation of Palestinian Telecommunication Corporations by using Balanced Scorecard approach* (Master Dissertation non published, The Islamic University-Gaza, Gaza, Palestine).
- Al-Batanouni, A. (2004). The impact of the linkage and integration between the balanced performance measure and the cost system on The Basis of Activity on the Performance of Business Organizations. *Journal of the Faculty of Commerce for Scientific Research*, 377(1), 387. Retrieved from <https://www.arado.org/ManagementNews/archives/13477>
- Amemiya, T. (1985). *Advanced Econometrics*. Harvard University Press, Cambridge.

- Awad. (2009). *The Effect of Linking and Integrating the Balanced Scorecard (BSC) and Activity Based Costing System (ABC) on the Performance of Palestinian Banks: An Empirical Study of the Bank of Palestine* (Master Dissertation non published, Palestine).
- Bryman, A., & Bell, E. (2007). *Business research methods*. Oxford University Press, USA.
- Buglione, L., & Abran, A. (2000). Balanced Scorecard and GQM: What Are the Differences? *FESMA-AEMES Software Measurement Conference*.
- Christinian, J., & Beiman, I. (2007). *Balanced Scorecard for State-owned Enterprises*. Driving Performance and Corporate Governance, Asian Development Bank, Philippines.
- Crawford, K. M., & Cox, J. F. (1990). Designing performance measurement systems for just-in-time operations. *International Journal for Production and Research*, 28(11), 2025-2036. <https://doi.org/10.1080/00207549008942850>
- Dan. (2017). *Assessed the performance of companies in the Indian by using BSC* (Master Dissertation non published, India).
- Dargham, & Fada, A. (2009). *The Impact of Applying the Balanced Scorecard Model in Enhancing the Strategic Financial Performance of the Palestinian National Banks operating in the Gaza Strip: An Applied Study* (Master Dissertation non published, The Islamic University-Gaza, Gaza, Palestine).
- Davis, T. R.V. (1996). Developing an Employee Balanced Scorecard: Linking Frontline Performance to Corporate Objectives. *Management Decision*, 34(4). <https://doi.org/10.1108/00251749610115116>.
- Gering, M., & Rosmarin, K. (2000). "Central beating" *Financial Management* (June, pp. 32-33). Retrieved from <http://www.iugaza.edu.ps/ara/research/>
- Ghaith. (2005). *The Importance of using Non-Financial Performance Measures to Increase the Effectiveness of Management Accounting in the Modern Industrial Environment: A Field Study on Saudi Industrial Enterprises in the city of Jeddah* (Master Dissertation non published, Saudi Arabia).
- Johnson, G., & Scholes, K. (1999). *Exploring Corporate Strategy* (5th ed.). Prentice Hall.
- Kaplan, R. S. (1992d). In Defense of Activity-Based Cost Management. *Management Accounting*, 74(5), 58-63.
- Kaplan, R. S. (2004, February). Measuring the strategic readiness of intangible assets. *Harvard Business Review*, 6(2), 10-17.
- Kaplan, R. S., & Norton, D. P. (1996a). *The Balanced Scorecard: Translating Strategy into Action*. Boston, MA: Harvard Business School Press.
- Keller. (2005). *American Journal of Industrial and Business Management*, 4(5). <https://doi.org/10.4236/ajibm.2019.912140>
- Kerazan, et al. (2018). *Identified the impact of corporate governance upon the performance level of Jordanian public joint stock industrial companies through using the BSC* (Master Dissertation non published, Jordan).
- Kholi, H. A. (2001). Use a balanced performance measurement model to measure performance Strategic Business Entities. *Journal of Management and Insurance Accounting*, (57), 48. Retrieved from <http://www.iugaza.edu.ps/ara/research/>
- Latif, A., & Turkman. (2006). *Balanced Scorecard as a Performance Measurement Tool* (Master Dissertation non published Amman, Jordan).
- Madhoun & Batniji. (2013). *Strategic Planning using a Balanced Scorecard - an Empirical Study on the Center for Community Training and Crisis Management – Gaz* (Master Dissertation non published, The Islamic University-Gaza, Gaza, Palestine).
- Malik, A. (2006). *Balanced Measurement Approach as a Tool for Developing Performance Appraisal Systems in Jordanian Industrial Projects: A Theory and Practice Study* (Master Dissertation non published Amman, Jordan).
- Palepu, K. G., Healy, P. M., & Bernard, V. L. (2000). *Business Analysis & Valuation: Using Financial Statements* (2nd ed.). South-Western College Publishing: Thomas Learning.
- Sekaran, U. (2005). *Research Methods for Business with Spss 13.0 Set* (4th ed.). New York: John Wiley and Sons.
- Sullivan, W. G., & Needy, K. L. (2000). Determination of economic value for a proposed investment in new

manufacturing. *The Engineering Economist*, 45(2), 166-181.

The Palestine Monetary Authority (PMA). (2018). Retrieved from <http://www.pma.ps/>

Walker & Maddan. (2009). *Statistics in Criminology and Criminal Justice: Analysis and Interpretation* (4th ed.).

Weston, J. F., & Eugene, F. B. (2002). *Managerial Finance* (7th ed.).

Yılmaz, & Nuri. (2018). *Assessed the Turkish Banks sustainability performance by using TOPSIS Method and Balanced Scorecard Approach* (Master Dissertation non published, Turkey).

### **Copyrights**

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).