EFFECT OF FINANCIAL REPORTING QUALITY AND SUSTAINABILITY BALANCED SCORECARD ON THE VALUE AND COMPANIES PERFORMANCE: (AN APPLIED STUDY ON COMPANIES LISTED ON THE IRAQI STOCK EXCHANGE

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Abstract

The present research aims to diagnose the reality of the quality of financial reports in the companies under study and also to emphasize the necessity of employing a sustainability balanced scorecard to improve the value and performance of the companies investigated. To achieve the research aims and test the hypotheses,(35) companies were selected. These companies work in the industrial, services, agricultural, and hotels sectors enlisted within the Iraqi Stock Exchange for the period (2013 - 2018). As for the means of analysis and of testing hypotheses, the statistical program (12 Eviews) was used, and the most important results reached is that there is a positive moral effect of the quality of financial reports on the value and performance of the company. Moreover, there is a moral effect of the Sustainability-balanced scorecard, positive on company performance and negative on company value.

Keywords: Sustainability balanced scorecard (SBSC). Financial reporting quality (FRQ). company value (CV). Company performance (CP)

Introduction

The quality of financial reports directly or indirectly affects the market value of the company and increases the trading activity and prices of its shares (Abass et al., 2022; Flayyih & Khiari, 2023; Maseer et al., 2022). The effect of the quality of financial reports becomes clear when the information is delayed or is inaccurate and does not rely on agreed-upon principles and standards, so this results in a negative impact on investors` behavior. Hence, it negatively affects the market value of the company. Ferrero (2014) confirms that the lack of disclosure and transparency affects the quality of accounting information, which results in inconsistencies and differences in the accounting information disclosed to investors, known as the phenomenon of asymmetry in accounting information. This, in turn, would result in many negative effects that are reflected on the value of the company. (Rashem & Abdullah, 2018). Therefore, information issued by any company has become an essential resource for financial markets because they provide less asymmetry of information between managers, investors, regulatory bodies, society and other stakeholders (Abass et al., 2023; S. I. Ali et al., 2023; Al-Taee & Flayyih, 2023; Nikkeh et al., 2022). Based on this, one of the main questions that arises about the quality of financial reports is their impact on the subsequent performance of the company, that is, how the market values this high quality (Ferrero, 2014). The information revolution, that has emerged, increases management's need for strategic information related to the external environment and competitors` analyses, so a new development has emerged in the method of monitoring and assessing performance, through the introduction of a new and modern tool called the sustainability- balanced scorecard (Abdullah & Bin Mansor, 2018; AL-Timemi & Flayyih, 2013; Hadi, Abdulhameed, et al., 2023). Kariozen (2012) states that the balanced scorecard is a tool for creating value because it significantly increases the company's profitability and thus increases its value. There is an impact of the dimensions of the balanced scorecard combined on the level of maximizing profitability in companies, which positively affects them by increasing their market value (M. A. Ali et al., 2023; Alkhafaji et al., 2018; Al-Shammari et al., 2017; Hadi, Ali, et al., 2023; Hasan et al., 2023; Jaber et al., 2023). Therefore, the research problem is summarized in the following fundamental questions: 1-Is it possible to achieve the highest quality level in issuing the financial reports of companies, and what is the extent of their impact on the value and performance of the companies under study? 2- Is it possible to apply SBSC in all its dimensions in the companies under study? The aim of the research is to diagnose the reality of the quality of financial reports in the companies under study and also to emphasize the necessity of employing the SBSC to improve the value and performance of the companies under study.

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The concept of financial reporting quality:

The quality of financial reports is defined as the extent of the accuracy of the information in those reports, which reflects the reality of the company's operations, its economic position, and the results of its work (Alwan et al., 2023; Alyaseri et al., 2023; Salman et al., 2023). Thus it will relate to and affect both the statements of financial position and income, and it also leads to providing verifiable current information to shareholders about losses, cases of financial failure and unfavorable financial events, enabling them to make sound decisions (D˘anescu and Stejerean 2022). It was concluded that the quality of financial reports is "the degree of accuracy that makes financial reports capable of conveying information to their users, especially equity investors, about the company's operations in a way that enables them to estimate expected future cash flows and to assist in the purposes of financial contracts (Anto and Yusran, 2023). The quality of financial reports was also addressed as: those reports free from any distortion, deception, or fraud. Through them, the company's current situation is known, assessed, and the future situation is predicted as their goal is to express the company's financial position in a true and fair manner (Taweel, 2020).

Financial reporting quality standards: Despite the existence of multiple standards of financial reporting quality, there are three standards (models) that are considered the most widely used, and these are as follows:

1. **Model (measure) of quality of accounting information:** This type of standards depends on measuring the quality of financial reports on the basis of measuring the qualitative characteristics of accounting information, which are: "appropriateness - reliability - dependability - verifiability - comparability - timelines (Taweel, 2020).

2. **Model (measure) of accounting conservatism:** It is one of the important means of reducing and alleviating the effects of the problem of moral decline resulting from asymmetry of information. It also limits the ability of the organization's management to carry out several actions that help it achieve its own interests at the expense of the interests of other parties. Thus, it provides protection for investors and reflects positively on improving the quality of reports. One of the most important of these models is the market value model to book value model (Mesbah and Ramadan, 2022).

3. **Profit Quality model (scale)** The level of earnings management was used as a substitute variable for the quality of financial reports. It was indicated that there is an inverse relationship between the quality of earnings and earnings management and then the quality of the financial report. A measure of earnings management was used, which is the measure of optional benefits management (Hadi, Abdulhameed, et al., 2023; Hadi, Ali, et al., 2023).

SBSC: It is known as a tool derived from the traditional balanced scorecard to suit the environmental and social aspects and the main pillars of corporate sustainability. Sustainability management with the balanced scorecard helps overcome the shortcomings of traditional methods in environmental and social management systems by integrating the three pillars of sustainability into one comprehensive strategic management tool (Chia, 2011). The SBSC is one of the most promising tools for better integration of environmental, social and economic aspects to measure and manage corporate sustainability (Miloloža, 2022). It is also pointed out that the SBSC is "a type of balanced scorecard specifically designed to reflect the sustainability issues and objectives of companies, in order to clarify appropriate strategies and translate them into action (Ibrahim, et al., 2023).

Dimensions or axes of SBSC:

SBSC includes five dimensions: (Kaplan & Norton, 1992)

1. **The financial dimension**: The financial dimension depends on the financial and accounting records and reports, in analyzing all the results of the facility's work and deducing the financial ratios that show the important aspect of the facility's economic performance, The balanced scorecard depends on linking the facility's financial goals to the strategy of the facility itself, as financial goals are considered the final outcome of the other dimensions that make up the balanced scorecard, whose efforts are limited to improving the facility's strategic financial results.

2. **The customers` Dimension:** Work at the present time is the main focus for the success of every economic facility producing a specific product or providing services in the markets because of its main connection to covering the facility's costs and realizing profits, as well as the continuity and survival of the facility's activity.

3. **The internal operations` dimension:** It means all the operations, events and activities that occur within the facility distinguishing it from other facilities, and through which the needs of customers, their goals and the goals of the owners of this facility are met.

4. **The learning and growth dimension:** The dimension of learning and growth is considered the main driver for completing all internal operations in the facility, which tends to create value for customers and owners of the facility.

5. **The environmental and social dimension:** It clarifies the scope of the facility's responsibility and its function in managing the interests of other parties related to the facility, including shareholders, customers, employees, society, and the state, in a way that leads to achieving a balance between all those interests. Adding a fifth dimension, which is the environmental and social dimension, greatly helps the facility achieve its goals, whether internal or external. This is due to the fact that paying attention to the environment and society greatly assists in the success of any facility, achieving its goals, and its endeavor to compete with large establishments.

The impact of the quality of financial reporting and SBSCS on the performance and value of the company

Before discussing the impact of the quality of financial reports and the balanced scorecard on the value and performance of the company, we must know the concepts of company value and CP.

The company value: It is "the fair monetary amount reached by a specialized expert, as generally accepted by the various parties concerned at every stage of request to measure it, which reflects the fair value of all the company's resources exploited in its existing organization in light of the concept of continuity of activity" (Hawari, 2008)

The company's value is "the value that expresses the amount paid for a specific asset or right in order to obtain future returns from the use of this asset" (Abdel-Al, 2008)

Performance: Issuing a judgment on the social legitimacy of a specific activity, meaning that it is linked to social action and knowledge, in a way that leads to gaining social acceptance in addition to economic legitimacy for the activities on which the institution is based (D Kaisergruber, J. Landrieu, 1999). Performance also means "a reflection of how the organization uses human financial resources and exploits them efficiently and effectively in a way that makes it able to achieve its goals That is to say, it is the product of two basic elements, which are the way in which the company's resources are used, i.e. the efficiency factor and the effectiveness factor. Performance is used to judge organizations and institutions in terms of their ability to achieve their goals, and the extent of their commitment to guidance in achieving that" (B. Doriath, 2000)

The extent to which the SBSC is able to reflect the value and performance of the company:

The SBSC has the ability to raise the value of the company as well as to identify the level of its performance, and this will be identified through the following points:

1. **Adopting the balanced scorecard as a tool to link both the budget and the strategy to assess CP**: The balanced scorecard has been developed in accordance with the requirements of administrative control, and this was done by linking the card's perspectives and methods of administrative control, represented by budgets and standard costs. The relationship of the budget to the company's strategy is based on the extent of management's interests and the reactions related to them. The reports that are prepared according to the balanced scorecard make it possible to interpret and clarify the degree of progress in achieving the strategy by linking both the strategic learning process and the control conducted on operational processes (Kaplan, 2007)

2. **Relying on the balanced scorecard as a driving indicator for making decisions and assessing companies' performance:** Leadership indicators are important metrics that serve to determine future financial and non-financial results in order to guide management in making the necessary decisions. Besides, leadership indicators also determine and measure performance because they are an important part of modern management. There are also many performance leadership indicators that consist of the following measures:

1/2 Measures of production process efficiency: They are "measures that describe the efficiency of the actual conversion of resources into products, meaning that these can include processes that extend into the value chain

2/2Customer metrics: These are "metrics that describe how to maximize customer satisfaction and gain customer faithfulness

2/3 Measures of learning and organizational growth: They are "measures that describe how increased capabilities are organized and used to develop new products and potentially provide more efficient products (Hilton, 2006).

3. **Using the Balanced Scorecard to Achieve Strategic Control:** Balanced scorecard is integrated into administrative processes to achieve strategic control, because strategic control is carried out through the use of the balanced scorecard according to the following:

3/1 Translating the company's strategy into several goals and measures included in the balanced scorecard.

3/2Working on developing a plan for the company, as well as setting sub-goals for each strategic goal and determining the path markers related to this plan.

3/3Determine the necessary programs to implement the company's plan in light of a timetable. The programs must also clarify the cause-and-effect relationship in order to link each of the dimensions of the SBSC.

3/4 Dividing the strategic program into an action plan, to be monitored by the company. This plan also includes operational budget programs.

The impact of the quality of financial reporting on the value and CP

Financial reports are among the most important mechanisms of the company's control structure and are a means of delivering the necessary information to users of financial reports. Lack of confidence among users in the information available in financial reports due to the presence of fraud and management's use of fraudulent methods to give an impression of the CP other than its true performance has also led to paying more attention to the study of the quality of financial reports in light of the important information they contain. Additionally, the quality of financial reports contributes significantly to improving investment efficiency, by reducing information asymmetry and reducing investment risks (McDermott, 2012). A number of opinions have been found that differ about the relationship between the quality of financial reports and the company's value. A number of researchers believe that the quality of financial reports has a positive impact on the company's value. This was affirmed through a study that targeted figuring out the relationship existing between the quality of earnings, which is measured by both "quality of accruals – continuity of profits – suitability – accounting conservatism – appropriate timing – predictive ability – income smoothing" and the value of the company (Gaio & Raposo, 2011). Furthermore, a study of the relationship between the quality of financial reports and the value of the company, measured on the basis of accounting conservatism, concluded that financial conservatism helps improve the credit capacity of the company, and also limits profit management practices, which leads to enhancing the value of the company. Also, the companies that followed the policy of conservatism in financial reporting during the financial crisis led to a slight decline in their stock returns, and were able to maintain a high level of investments (Asyik, et.al, 2023).

Therefore, information issued by any company has become an essential resource for financial markets because it provides less asymmetry of information between managers, investors, regulatory bodies, society and other stakeholders. Accordingly, one of the main questions that arises about the quality of financial reports is about its impact on the subsequent performance of the company, that is, how the market values this high quality (Ferrero, 2014). Ferrero (2014) showed that financial reports quality (FRQ) has a positive impact on the CP through some of the measures used, which are the quality of profits and the quality of accruals.

Second: Study population and sample

Before starting the process of measuring the study variables, it is necessary to get to know the study population and sample, as the study population represents all Iraqi industrial, service, agricultural, and hotel joint stock companies listed on the Iraq stock exchange for the period from the year 2013 - 2018, provided that the company meets the following conditions.

1. It must be listed on the market for the period between 2010 and

2019, because the accruals quality model requires data for a previous four years and the next year.

2. Its fiscal year ends on 12/31.

3. There should be no interruption during the years of research.

4. It must not be a bank or a financial company.

5. Access to the company's financial data is available.

Through the above conditions, the number of companies included, which represent the research sample, was (35) companies listed on the market. Information was collected from the official website of the Iraq stock exchange, as well as the securities commission, which is responsible for publishing the financial reports of companies listed on the market.

Previous Studies and Building Main and Sub-Hypotheses:

There are several recent studies that have addressed the topic of this research, such as the study conducted by Qizam (2021) which found that increased disclosure has a positive impact on the CP, while Ferrero (2014) proved that there is a significant impact of the quality of financial reports on the CP. Besides, it was proven by Alotaibi (2021) that there is an impact of accounting disclosure of sustainability development on the quality of financial reports and thus increasing the value of the company, while a study by Kalhor et al. (2013) proved that there is a relationship between the quality of disclosure of accounting information and the CP. Based on that, the following is assumed:

The first main hypothesis: The quality of financial reports has an effect on the value of a company.

The second main hypothesis: The quality of financial reports has an impact on CP.

As for the studies that dealt with the SBSC, the first study is by Ahmeti et al (2016) which found that the balanced scorecard contributes to improving the CP and thus increasing its profitability , while Trung (2020) found that there is a clear impact of the balanced scorecard on improving performance in banks. Triwiyono & Wati (2018), on the other hand, also proved that there is an impact of balanced scorecard on CP through competitive advantage, and that the better application of the balanced scorecard in the company will increase the competitive advantage and company's performance, while John et al (2015) proved, through their study, conducted on a group of Australian companies, that there is a clear impact of the SBSC on the financial performance of company and thus raising its value. As for the study conducted on oil companies which was done by Kariozen (2012), it proved that the balanced performance scorecard has a significant impact on raising the value of companies. Accordingly, the following is assumed:

The third main hypothesis: SBSC has an impact on the company's value, and it is subdivided as follows:

1. The impact of the financial perspective of the SBSC on the company's value.

2. The impact of customers' perspective of the SBSC on the company's value.

3. The impact of the learning and growth perspective of the SBSC on the company's value.

4. The impact of the governance perspective of the sustainable balanced scorecard on the company's value.

5. The impact of the societal environment perspective of the SBSC on the company's value.

Hypothesis testing model

For the purpose of testing the first and third hypotheses, model no (1) is used, while model no (2) is used to test the second and fourth hypotheses:

$$MV_{t.i} = \beta + \beta_1\, FRQ_{t.i} + \beta_2\, FP_{t.i} + \beta_3\, CP_{t.i} + \beta_4\, LGP_{t.i} + \beta_5\, GP_{t.i} + \beta_6\, SEP_{t.i} + \beta_7\, SIZE_{t.i} + \beta_8\, LEV_{t.i} + \beta_9\, SGR_{t.i} + \beta_{10}\, LOSS_{t.i} + \beta_{11}\, CFO_{t.i} + \varepsilon_{t.i}$$

$MV_{t.i}$ = market value

$ROA_{t.i}$ = recruals on assets

$FRQ_{t.i}$ = financial reporting quality

$FP_{t.i}$ = financial perspective

$CP_{t.i}$ = clients perspective

$LGP_{t.i}$ = learning and growth perspective

$GP_{t.i}$ = governance perspective

$SIZE_{t.i}$ = company size

$LEV_{t.i}$ = financial lever

$SGR_{t.i}$ = sales growth rate

$LOSS_{t.i}$ = losses

$CFO_{t.i}$ = cash flow from operating activities

$IND_{t.i}$ = type of industry

$YEAR_{t.i}$ = years

$\varepsilon_{t.i}$ = residuals

Research variables // independent variables

1. **The first independent variable** is the quality of financial reports. In calculating the quality of financial reports, the researcher relied on the quality of recruals by making use of the Dechow and Dichev (2002) model modified by Francis et al (2005), as shown in the model No (3):

$$\frac{TCC_{it}}{Asset_{it-1}} = \Phi_0 + \Phi_1 \cdot \frac{CFO_{it-1}}{Asset_{it-1}} + \Phi_2 \cdot \frac{CFO_{it}}{Asset_{it-1}} + \Phi_3 \cdot \frac{CFO_{it+1}}{Asset_{it-1}} + \Phi_4 \cdot \Delta Rev_{it} + \Phi_5 \cdot PPE_{it} + \varepsilon_{it}$$

$ACC_{i.t}$: Total accruals are the difference between operating profit and operating cash flow.

$Asset_{i.t-1}$: Total assets at the beginning of the year.

$CFO_{i.t}$: Cash flow from operating activities.

$\Delta Rev_{i.t}$: Change in revenues (current year's revenues – previous year's revenues).

$PPE_{i.t}$: Assets at book value.

$\varepsilon_{i.t}$: Estimation error (residuals): The standard deviation of the residuals between the current year and previous 4 years the quality of the accruals. The higher the standard deviation, the lower the quality of the accruals.

1. **The second independent variable** is the SBSC. In calculating the SBSC, the researcher relies on five metrics, which are:

- Financial perspective: It is measured by net profit after tax/nominal capital.

- Customer perspective: It is measured through the following equation:

Market share/market share of all competitors in the same field

- Learning and growth perspective: It is measured through the following equation:

research and development expenses for the current year - research and development expenses for the previous year / research and development expenses for the previous year

- Governance perspective: It is measured through a binary variable that takes (1) if company i changes the managing director in year t, otherwise it takes (0).

- Community environment perspective: It is measured through the following equation:

social security contribution for the current year – social security contribution for the previous year / social security contribution for the previous year

Dependent variables

1. The first dependent variable in this study is market value. Market value is measured through the market price of a share multiplied by the number of shares.

2. The second dependent variable in this study is CP. The CP is measured by dividing the net profit by the total assets.

Control variables

1. Company size: It represents the natural logarithm of the company's assets.

2. Financial leverage: It is the total liabilities divided by the total assets.

3. Sales growth rate: It is measured through the following equation:

Current year sales – previous year sales / previous year sales

4. Losses: A binary variable that takes (1) if company i in year t is a loss, otherwise it takes (0).

5. Operating cash flow.

Descriptive statistics

Descriptive statistics are carried out for all variables during the study period from (2014) to (2018). Table 1 below is devoted to displaying the arithmetic mean, median, standard deviation, and maximum and minimum limits for all variables, as shown in the following table:

Financial reporting quality (FRQ: (It was shown that the lowest value for the quality of financial reports was (0.014), while the highest value was (0.251), with an arithmetic mean of (0.088) and a standard deviation of (0.061).

Financial perspective (FP): It was found that the lowest value for the financial perspective was (-1.293), while the highest value was (1.817), with an arithmetic mean of (0.210) and a standard deviation of (0.476).

Customer perspective (CP): It was found that the lowest value for the customers' perspective was (0.000), while the highest value was (0.934), with an arithmetic mean of (0.183) and a standard deviation of (0.274).

Learning and growth perspective (LGP :(It was found that the lowest value for the learning and growth perspective was (-1.000), while the highest value was (45.519), with a mean of (1.695) and a standard deviation of (6.857).

Governance perspective (GP): It was found that the lowest value for the governance perspective was (0.000), while the highest value was (1.000), with a mean of (0.267) and a standard deviation of (0.445).

Community environment perspective (SEP): It was found that the lowest value for the societal environment perspective was (-0.913), while the highest value was (7.131), with a mean of (0.201) and a standard deviation of (0.919).

Company value (MV): It was found that the lowest value of the company value was (20.352), while the highest value was (27.179), with an arithmetic mean of (23.488) and a standard deviation of (1.462).

Return on assets (ROA: (It was found that the lowest value for return on assets was (-0.654), while the highest value was (0.327), with an arithmetic mean of (0.040) and a standard deviation of (0.129).

Return on equity (ROE): It was found that the lowest value of return on equity was (-0.496), while the highest value was (1.092), with an arithmetic mean of (0.089) and a standard deviation of (0.208).

Tobin's Q (TQ): It was found that the lowest value of the Tobin's Q ratio was (0.401), while the highest value was (70.435), with an arithmetic mean of (4.088) and a standard deviation of (7.770.(

Hypothesis testing

The first main hypothesis: "The effect of the quality of financial reports on the value of the company"

The third main hypothesis: The impact of the SBSC on the company's value, and the following hypotheses branch out from it:

1. The impact of the financial perspective of the SBSC on the company's value.

2. The impact of customers' perspective of the SBSC on the company's value.

3. The impact of the learning and growth perspective of the SBSC on the company's value.

4. The impact of the governance perspective of the SBSC on the company's value.

5. The impact of the societal environment perspective of the SBSC on the company's value.

Table 2 shows, through the results of the statistical analysis the significance of the model, where the value of (Prob) (F-statistic) was less than (0.05) and was specifically (0.000), which indicates that the model is valid for testing and its results are reliable. As for the value of (R- squared), it was (0.598),

Table 1: Descriptive statistics for all study variables.

Variable	Mean	Median	Maximum	Minimum	Std. Dev.
MV	23.488	23.484	27.179	20.352	1.462
ROA	0.040	0.031	0.327	-0.654	0.129
ROE	0.089	0.045	1.092	-0.496	0.208
T_Q	4.088	1.883	70.435	0.401	7.770
FRQ	0.088	0.075	0.251	0.014	0.061
FP	0.210	0.058	1.817	-1.293	0.476
CP	0.183	0.041	0.934	0.000	0.274
LGP	1.695	-0.090	45.519	-1.000	6.857
GP	0.267	0.000	1.000	0.000	0.445
SEP	0.201	0.049	7.131	-0.913	0.919
SIZE	22.908	22.820	26.582	19.552	1.392
LEV	0.303	0.211	2.668	0.015	0.355
SGR	5.213	0.033	459.783	-1.000	45.844
LOSS	0.743	1.000	1.000	0.000	0.439
CFO	0.054	0.026	0.858	-0.835	0.213

Table 2: For testing the first and third main hypotheses and their branches.

Variable	Coefficient	Std. Error	t-Statistic	Prob.	VIF
C	167.045	144.778	1.154	0.252	
FRQ	7.771	2.134	3.641	0.001	1.705
FP	-0.216	0.280	-0.772	0.442	1.795
CP	-0.278	0.715	-0.390	0.698	3.891
LGP	-0.004	0.015	-0.281	0.780	1.100
GP	0.305	0.239	1.275	0.206	1.146
SEP	-0.144	0.111	-1.291	0.200	1.064
SIZE	0.757	0.129	5.888	0.000	3.245
LEV	0.051	0.334	0.152	0.879	1.425
SGR	0.002	0.002	0.923	0.358	1.263
LOSS	0.719	0.290	2.480	0.015	1.645
CFO	0.036	0.580	0.062	0.951	1.545
R-squared	0.598	Adjusted R-squared		0.538	
F-statistic	9.970	Prob(F-statistic)		0.000	

which means that the interpretive power of the independent variables to the dependent variable is (60%). The value of (Adjusted R-squared) was (0.538), which means that the independent variables affect the dependent variable by 54%) and the remainder, which was (46%), is due to other factors outside the model. As for the values of the variance inflation factor (VIF) were less than (10), which indicates that there is no problem in the linear relationship between the variables of the first model.

Explanation of the result of the first hypothesis: The results of the statistical analysis show that the value of (Prob) for the independent variable, quality of financial reports, is less than (0.05), reaching (0.001), which indicates that there is a direct significant effect of the quality of financial reports on the company's value.

Explanation of the result of the third hypothesis: The results of the statistical analysis show that the value of (Prob) for the independent variable, the SBSC, is measured by all card perspectives. They show that all values are higher than (0.05), which indicates that there is no significant effect of the balanced scorecard on the company's value.

After reviewing many recent studies that dealt with the subject of the study, we find that the results of the current study agree with the study of Alotaibi (2021), which concludes that there is an impact of accounting disclosure of sustainable development on the quality of financial reports and thus increases the value of the company, and the study of Al-Muaini and Nouri (2017) which states that there is an impact of the quality of financial reporting on the market value, and the study by Hussein and Al-Tamimi(2016)which concludes that the market value of companies is maximized when the quality of financial reporting is increased.

However, the result of the current study does not agree with the study by Hamza and Abu Talib (2022), which concludes the non-existence of a relationship between the quality of financial reports and stock returns or value, and the study of Najeeb and Al-Omari (2018) which found that there is no significant effect on stock returns or value, and the study conducted by John et al (2015), on a group of Australian companies and found out a clear impact of the SBSC on raising the value of the company. Likewise, it does not agree with the study conducted by Kariozen (2012) on oil companies which proved that the balanced scorecard has a significant impact on raising the value of companies. The reasons behind the difference lie in in the current study environment and the different time period of the study. Similarly, there is also a difference in the size and nature of the companies sampled for the study, as well as differences in the laws, regulations and instructions that govern the Iraq Stock Exchange.

Testing the First Sub-Hypothesis of the Second and Fourth Main Hypotheses and Their Branches

1. The impact of the quality of financial reports on the CP as measured by returns on assets.

2. The impact of the SBSC on the CP as measured by return on assets, from which the following hypotheses emerge:

a. The impact of the financial perspective of the SBSC on CP as measured by return on assets.

b. The impact of customers' perspective of the SBSC on CP as measured by return on assets.

c. The impact of the learning and growth perspective of the SBSC on CP as measured by return on assets.

d. The impact of the governance perspective of the SBSC on CP as measured by return on assets.

e. The impact of the societal environment perspective of the SBSC on CP as measured by return on assets.

Table 3 shows, through the results of the statistical analysis, the significance of the model, where the value of (Prob) (F-statistic) was less than (0.05) and was specifically (0.000), which indicates that the model is valid for testing and its results are reliable. As for the value of (R - squared), it was (0.867), which means that the explanatory power of the independent variables on the dependent variable is (87%), while the value of (Adjusted R-squared) was (0.847), which means that the independent variables affect the dependent variable by (85%). The remainder is (15%) due to other factors outside the model, while the values of the variance inflation factor (VIF) are less than (10), which indicates that there is no problem in the linear relationship between the variables of the second model.

Explanation of the results of the first sub-hypothesis of the second main hypothesis:

a. The results of the statistical analysis show that the value of (Prob) for the independent variable, the sustainable balanced scorecard, measured by the financial perspective index, the customer perspective, and the societal environment perspective, is less than (0.05), which indicates that there is a positive moral impact of these perspectives on the CP as measured by the return on assets.

b. The results of the statistical analysis show that the value of (Prob) for the independent variable, the SBSC, as measured by the learning and growth perspective index and the governance perspective, is higher than (0.05), which indicates that there is no significant effect of these perspectives on the CP as measured by return on assets.

Variance inflation factor (VIF)

Variance inflation factor (VIF) test was conducted for the third model, and the results are as in the following table:

Table 4 indicates that all values of the variance inflation factor (VIF) are less than (10), with the exception of the two variables of size and customers' perspective (CP), a matter which indicates that there is a problem with the linear correlation between the variables of the study, and to make the variables free of the linear correlation problem, size variable has been omitted.

Testing the second sub-hypothesis of the second and fourth main hypotheses and their branches

1. The impact of the quality of financial reports on the CP as measured by return on equity.

2. The impact of the SBSC on the CP as measured by return on equity, from which the following hypotheses emerge:

a. The impact of the financial perspective of the SBSC on CP as measured by return on equity.

b. The impact of customers' perspective of the SBSC on CP as measured by return on equity.

c. The impact of the learning and growth perspective of the SBSC on CP as measured by return on equity.

Table 3: Testing the first sub-hypothesis of the second and fourth main hypotheses and their branches.

Variable	Coefficient	Std. Error	t-Statistic	Prob.	VIF
C	1.576	4.583	0.344	0.732	
FRQ	-0.084	0.099	-0.848	0.399	1.705
FP	0.134	0.010	12.739	0.000	1.795
CP	0.061	0.028	2.166	0.033	3.891
LGP	-0.001	0.001	-1.644	0.104	1.100
GP	-0.011	0.007	-1.691	0.094	1.146
SEP	-0.007	0.002	-3.018	0.003	1.064
SIZE	-0.008	0.005	-1.527	0.130	3.245
LEV	-0.044	0.023	-1.901	0.061	1.425
SGR	0.000	0.000	0.897	0.372	1.263
LOSS	0.066	0.011	6.036	0.000	1.645
CFO	0.103	0.032	3.273	0.002	1.545
R-squared	0.867	Adjusted R-squared		0.847	
F-statistic	43.554	Prob(F-statistic)		0.000	

d. The impact of the governance perspective of the SBSC on CP as measured by return on equity.

e. The impact of the societal environment perspective of the SBSC on CP as measured by return on equity.

Table 5 shows, through the results of the statistical analysis, the significance of the model, where the value of (Prob) (F-statistic) is less than (0.05) and is specifically (0.000), which indicates that the model is valid for testing and its results are reliable. As for the value of (R-squared), it is (0.851), which means that the explanatory power of the independent variables on the dependent variable is (85%). On the other hand, the value of (Adjusted R-squared) is (0.831), which means that the independent variables affect the dependent variable by (83%). The remainder is (17%) and this is due to other factors outside the model, while the values of the variance inflation factor (VIF) after deleting the size variable are less than (10), which indicates that there is no problem in the linear relationship between the research variables.

Explanation of the result of the second sub-hypothesis of the second main hypothesis:

The results of the statistical analysis show that the value of (Prob) for the independent variable, quality of financial reports, is less than (0.05) and reached (0.006), which indicates that there is a direct significant effect of the quality of financial reports on the CP as measured by return on equity.

Explanation of the result of second sub-hypothesis of the fourth main hypothesis

a. The results of the statistical analysis show that the value of (Prob) for the independent variable, the SBSC, measured by the financial perspective index and the customer perspective, is less than (0.05), reaching (0.000), which indicates that there is a direct significant impact of these perspectives on the CP as measured by the return on assets.

b. The results of the statistical analysis show that the value of (Prob) for the independent variable, the SBSC, measured by the indicator of the learning and growth perspective, the governance perspective, and the societal environment, is higher than (0.05), which indicates that there is no significant impact of these perspectives on the CP as measured by return on equity.

Testing the third sub-hypothesis of the second and fourth main hypotheses and their branches

Table 4: Variance inflation factor (VIF) test results.

Variable	VIF
FRQ	5.455
FP	7.922
CP	56.296
LGP	1.775
GP	3.645
SEP	1.439
SIZE	38.574
LEV	2.777
SGR	2.036
LOSS	4.383
CFO	3.137

1. The effect of the quality of financial reports on the CP, measured by Tobin's Q ratio.

2. The impact of the SBSC on the CP as measured by Tobin's Q ratio, from which the following hypotheses emerge:

a. The impact of the financial perspective of the SBSC on CP as measured by Tobin's Q ratio.

b. The effect of customers' perspective of the SBSC on CP as measured by Tobin's Q ratio.

c. The impact of the learning and growth perspective of the SBSC on CP as measured by Tobin's Q ratio.

d. The impact of the governance perspective of the sustainable balanced scorecard on CP as measured by Tobin's Q ratio.

e. The impact of the societal environment perspective of the SBSC on CP as measured by Tobin's Q ratio. (Table 6)

Through the results of the statistical analysis, table no (6) shows, the significance of the model, where the value of (Prob) (F-statistic) was less than (0.05) and was specifically (0.000), which indicates that the model is valid for testing and its results are reliable. As for the value of (R- squared), it was (0.556), which means that the explanation power of the independent variables by the dependent variable is (65%). By contrast, the value of (Adjusted R-squared) was (0.489), which means that the independent variables affect the dependent variable by (49%). The remainder is (51%) and this is due to other factors outside the model, while the values of the variance inflation factor (VIF) are less than (10), which indicates that there is no problem in the linear relationship between the variables of the fourth model.

Explanation of the result of the second sub-hypothesis of the second main hypothesis:

The results of the statistical analysis show that the value of (Prob) for the independent variable, quality of financial reports, is less than (0.05), reaching (0.000), which indicates that there is a direct significant effect of the quality of financial reports on the CP, as measured by Tobin's Q ratio.

Explanation of the third sub-hypothesis of the fourth main hypothesis and its branches

a. The results of the statistical analysis show that the value of (Prob) for the independent variable, SBSC, measured by the financial perspective index and the societal environment perspective, is less than (0.05), which indicates that there is a direct significant impact of these perspectives on the CP, as measured by Tobin's Q ratio.

b. The results of the statistical analysis show that the value of (Prob) for the independent variable, SBSC, as measured by the customer perspective index, learning and growth perspective, and the governance perspective is higher than (0.05), which indicates that there is no significant impact of these perspectives on the CP as measured by Tobin's Q ratio.

After reviewing many recent studies that dealt with the subject of the study, we find that the results of the current study agree with the study of Qizam (2021) which indicates that increased disclosure has a positive impact on the CP, of Ferrero(2014), which proved that there is a significant impact of the quality of reports on the CP, and of Kalhor et al (2013) which indicated that there is a relationship between the quality of disclosure of accounting information and the CP It also agrees with the study by Trung (2020) which states that there is a

Table 5: Testing the second sub-hypothesis of the second and fourth main hypotheses and their branches.

Variable	Coefficient	Std. Error	t-Statistic	Prob.	VIF
C	4.426	2.890	1.531	0.129	
FRQ	0.222	0.079	2.827	0.006	3.896
FP	0.213	0.019	11.043	0.000	1.890
CP	0.037	0.012	3.185	0.002	4.244
LGP	0.000	0.001	-0.601	0.550	1.153
GP	0.003	0.009	0.279	0.781	1.866
SEP	-0.001	0.005	-0.273	0.785	1.087
LEV	0.037	0.027	1.346	0.182	2.008
SGR	0.000	0.000	1.238	0.219	1.059
LOSS	0.064	0.015	4.111	0.000	1.369
CFO	0.097	0.030	3.204	0.002	1.916
R-squared	0.851	Adjusted R-squared		0.831	
F-statistic	42.069	Prob(F-statistic)		0.000	

Table 6: Testing the third sub-hypothesis of the second and fourth main hypotheses and their branches.

Variable	Coefficient	Std. Error	t-Statistic	Prob.	VIF
C	455.539	159.964	2.848	0.006	
FRQ	15.152	3.305	4.585	0.000	1.691
FP	-1.222	0.406	-3.011	0.003	1.792
CP	1.425	1.083	1.316	0.192	3.866
LGP	-0.001	0.023	-0.028	0.977	1.078
GP	0.227	0.378	0.602	0.549	1.111
SEP	-0.400	0.089	-4.498	0.000	1.052
SIZE	-0.806	0.244	-3.307	0.001	3.240
LEV	1.739	0.641	2.712	0.008	1.347
SGR	0.005	0.019	0.240	0.811	1.250
LOSS	1.779	0.575	3.094	0.003	1.534
CFO	-1.255	0.747	-1.681	0.096	1.450
R-squared	0.556	Adjusted R-squared		0.489	
F-statistic	8.374	Prob(F-statistic)		0.000	

clear effect of the balanced scorecard on improving performance in banks, and the study of Wati and Triwiyono (2018) which indicates that there is an impact of the balanced scorecard on the CP through competitive advantage, and that the better application of the balanced scorecard in the company will increase its competitive advantage and performance. Likewise, the current study agrees with a study by Ahmeti et al.(2016) which indicates that the balanced scorecard contributes to improving the CP and thus increasing their profitability, the study by Al-Mubaideen et al.(2016) which found that there is an effect of the dimensions of the balanced scorecard on maximizing profitability, and the study by John et al.(2015), conducted on a group of Australian companies, and which proved that there is a clear effect of the SBSC on the company's financial performance.

Conclusion

This research has addressed the impact of the quality of financial reports and the SBSC on the performance and value of companies for a sample consisting of companies listed on the Iraqi Stock Exchange. In view of the development taking place in this research field, whether through academic theoretical research or applied research and professional experiences of companies, an attempt is made to address the most important and latest findings in this respect. There is literature in this field, namely the application of the quality of financial reporting approach and the SBSC. However, the successful application of this approach requires that the a company that intends to adopt it should provide several requirements and conditions necessary to ensure success in its application. The results of the research have shown that there is a positive impact of the quality of financial reports on the value and performance of the company. Therefore, laws of companies and the financial market in Iraq must be developed so that as much attention is given to the content of financial disclosure and reports as that paid to the form of financial reports. Besides, more attention should be paid in the future to the study of other dimensions of the quality of reporting such as, information on environmental dimensions, human resources, and financing structure. As for the SBSC, it has a negative impact on the company's value and a positive impact on its performance. Therefore, companies must conduct training courses for their leaders and employees on using the axes of the SBSC, as well as carry out more studies that maximize the benefits of using the balanced scorecard on the CP and its value, especially as it highlights the role of the balanced scorecard in formulating the general corporate strategy.

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