



## **The effect of fair value on the Relevance of the book value of the stock: An applied study in a sample of Iraqi banks**

Noor Hamza Salman<sup>1, a, \*</sup> & Asmaa Mahdi Al-Hashemi<sup>1, b</sup>, Fadhil A. Abedi<sup>1, c</sup>

<sup>a, b, c</sup> Accounting Techniques Department, Technical College of Management/ Kufa, Al-Furat Al-Awsat Technical University (ATU), 54003, Najaf, Iraq

<sup>a</sup> [noor.hamzahsalman@atu.edu.iq](mailto:noor.hamzahsalman@atu.edu.iq)

<sup>b</sup> [asmaa.mahdi@atu.edu.iq](mailto:asmaa.mahdi@atu.edu.iq)

<sup>c</sup> [abidy-fadhil@atu.edu.iq](mailto:abidy-fadhil@atu.edu.iq)

\*Corresponding Contact: [noor.hamzahsalman@atu.edu.iq](mailto:noor.hamzahsalman@atu.edu.iq)

**Abstract.** *Evolution has created an environment that needs standards to keep pace with its constant change. This led to changes in the accounting measurement which in turn affected the value of earnings per share. Therefore, the question of the study problem is focused on: Is there an effect of the fair value on the appropriateness of the book value of the stock?*

*This study aim to know the effect of fair value on the Relevance book value per share for the research sample bank listed in the Iraq Stock Exchange.*

*The importance of the study is embodied in the importance of accounting information for users of the financial statements in making their decisions and relying on them in evaluating the performance of the economic unit, as well as the interest of standard-setters and researchers in the Relevance of earnings per share as it is one of the means of evaluating the quality of accounting information. To achieve the goal of the research, the descriptive analytical approach was adopted in the practical aspect through statistical analysis using the (SPSS) program to measure the impact of fair value on the Relevance of the book value of the stock.*

*There are differences in the impact between measurement and fair value disclosure on the explanatory power of accounting figures*

*The research reached some recommendations, the most important of which are: Pay more attention to the disclosure of fair value and strive to adhere to the application of international financial standards that contribute to achieving the quality of information whose effects are positively reflected on future performance.*

**Keywords:** *Fair Value, Relevance Value, Book value per share*

## **1. INTRODUCTION**

Accounting thought has passed through several stages, perhaps the most prominent of which is the stage of professional and academic development, which began to establish rules and methods that can be relied upon in the embodiment of a consensual view on solutions to the most important accounting problems facing accounting measurement.

In the period that witnessed inflation, the historical cost, which is one of the most important bases of measurement on which accounting was based, did not meet the needs of the various users of financial statements because it lacked the Relevance property required by accounting information to be of quality, which made those interested and researchers in the field of accounting look for an alternative in measurement. The accountant provides what the historical cost failed to do, so a new concept



emerged, which is the principle of fair value, which was the product of changes taking place in the external environment in the capital market, which is important for all users, such as investors, in allocating their money and directing it towards the best investment opportunities available, which is reflected in the Value relevance the profitability of the share and improving the value of the economic unit.

## **2. MATERIALS AND METHODS**

### **2.1 theoretical materials**

#### **2.1.1 The problem of the study**

The last years in the economic environment witnessed a great revolution in development and change, and this development created an environment that needs standards to keep pace with its continuous change. This resulted in changes in the accounting measurement that in turn affected the value relevance earnings per share. Therefore, the question of the study problem is concentrated in: Is there an effect of the fair value on the Relevance of the book value of the stock?

#### **2.1.2. The importance of the study**

It comes from two important points:

- a. Helping each of the banks' departments and the beneficiaries of accounting information to assess the quality of this information through the Relevance of earnings per share.
- b. It shows the importance of Relevance earnings per share for users of financial statements in making their decisions and relying on them in evaluating the performance of the economic unit, in addition to the interest of standard-setters and researchers in the Relevance of earnings per share as it is one of the means of evaluating the quality of accounting information.

#### **3.1.2. Objectives of the study**

The study aims to achieve the following:

This study aim to identify the effect of fair value on the Relevance of the book value per share In a sample of Iraqi private banks.

#### **4.1.2. Study hypothesis**

There is an effect of the fair value on the Relevance book value of the shares of Iraqi private banks, the research sample.

#### **5.1.2. Previous studies**

This paragraph includes a brief presentation of the results of some studies that the researcher was able to collect and review, which dealt with various aspects and areas related to the subject of the current study, and had a significant impact on enriching this study in its theoretical and practical aspects:

'The relative value relevance of earnings and book value across industries' [1]

The study (2011) aimed to examine the systematic changes in the earnings fitness value and book values over twenty different years as well as examining the effects of variation in the earnings fitness value and book values across industries.

The study concluded that there is no significant difference in the value relationship of earnings and book values or the combined explanatory power of both earnings and book values across industries. The profitability value has also increased while the book value fitness has remained relatively constant when measured across industries.



In (2011) study Fair value accounting: information or confusion for financial markets?[2]  
The study aims to study the impact of fair value and disclosure by holding companies for American banks between the years (1996-2009) on the ability of financial analysts to predict profits.  
It concluded that the more disclosure related to the fair value, the better the information environment. Also, disclosure of fair value levels is beneficial to investors because it enhances the accuracy of the information and makes it less dispersed.  
And finally, a study in (2021) do fair value measurements affect accounting-based earnings quality? A literature review with a focus on corporate governance as moderator.[3]  
The study aimed to investigate the effect of fair value measurements on the quality of profits. And investigating the impact of management practices on the quality of profits.  
The study concluded that fair value measurements show a mixed quality of profits.  
Low-level fair value measurements reduce the quality of earnings.  
As for the current research, it was distinguished from previous studies by several points that can be summarized as follows:

1. According to the researcher's knowledge, no Arab or Iraqi study has previously linked the two variables (fair value and Relevance of the book value of the stock).

The research showed the effect of fair value on the book value of the shares In a sample of Iraqi private banks for the period (2010-2019).

#### **6.1.2. The concept of Fair value**

The oldest and most prominent definition of fair value is the definition of the US Internal Revenue Service (IRS) in (1959), which defined it as "the price at which property is exchanged between a buyer willing to buy and a seller willing to sell when the first (the buyer) is neither compelled to buy nor The second (the seller) is compelled to sell, and both have reasonable knowledge of the facts relating to the transaction.[4]

As for the researcher [5], the fair value "is the exit price that one can obtain in a reasonable exchange between knowledgeable parties."

It is defined as the price or amount agreed upon in the process of buying, selling, or transferring the ownership of an asset between willing, able, and mutually consenting parties without the presence of pressures that push the two parties to carry out the operation, and it expresses the equilibrium price between supply and demand in an effective (efficient) market and this on a specific date and place".[6]

#### **2.1.7. The importance of fair value**

a lot of studies have given the importance of fair value as a basis for accounting measurement and disclosure alternatively of historical cost, whether at the level of researchers or professional organization. Studies have shown the importance of fair value in the following:

1. The fair value reflects changes in the financial condition of the economic unit resulting from fluctuations in interest rates and market rates and their impact on the stock price.[7]
2. Providing information that helps shareholders in evaluating the administration's efficiency in optimally utilizing its available economic resources.
3. Assisting lenders by providing real information about the financial position of the economic unit, and its ability to provide the necessary liquidity to settle its obligations, and this is done by measuring short-term assets and liabilities at fair value.[8]

#### **2.2 Applied study**

In this part of the study, the results of the effect of the fair value on the Relevance of the book value per share will be discussed in the research sample represented by Iraqi banks



### 1.2.2 Iraq stock market

Attempts to establish an Iraqi financial market date back to the end of the thirties of the twentieth century, after a law was issued allowing the trading of shares and bonds in 1939, and the number of economic units increased until it reached 40 units in 1950, and its shares were traded in an informal market, then the issuance of Law No. 31 of 1957, which allowed the public to subscribe to the shares of those economic units. At the beginning of 1987, the Iraqi economy witnessed a transformation and began to involve the private sector and the necessity of co-existing with the public sector.

Regular financial trading for the shares of economic units, and the Baghdad Stock Exchange was established under Law 24 of 1991 so that the market enjoys a legal and administrative personality as an institution of public interest that does not aim for profit, but rather organizes and monitors securities and deals with them in a manner that ensures the validity, ease and protection of this dealing and in a manner that serves the interest of the economy and development Savings and investment awareness, and trading in the market was officially opened in 1992, in which shares of Iraqi joint-stock companies, bonds, and any Iraqi and non-Iraqi securities are traded Iraqi.[ 9]

#### 2.2.2. Measuring the effect of fair value on the Relevance book value per share

Through this paragraph, the effect of the fair value of each of the sample banks for the period (2015-2019) is measured on the Relevance of the book value to stock prices,

The measurement of the book value of equity per share (BVPS) for each bank was by dividing the book value of total equity at the end of the year (BV) by the number of shares issued at the end of the year (St) for each bank.

plus this is done by relying on the main statistical indicators for each of the sample banks to determine the value of the binary correlation coefficient (R) and the diagnostic coefficient ((R Square)) In addition to seeking to perform the analysis of variance and formulate the regression equation to identify the level of the probability function ((P\_ value) according to the following equation:

$$P /TA = B_0+ B_1BVPS/TA*FV /TA$$

Through the SPSS program, the relationship of the effect of the fair value on the Relevance book value of the share is tested, as follows:

#### 1. The effect of fair value on the Relevance book value per share of the Bank of Baghdad

Table (1) Summary of the form for the Bank of Baghdad

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.907 <sup>a</sup>	.823	.764	.014598
a. Predictors:: (Constant), BVPS*FV				
Source:SPSS				

The summary of the results in Table (A-1) indicates that the correlation coefficient (0.907), which is a direct correlation, and the degree of diagnosis of the model reached (82%), and this means that it was able to explain (82%) of the changes that affect (Relevance book value of the stock) and 18%)) of the changes were not diagnosed.



Table (1-B) analysis of variance for the Bank of Baghdad

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.003	1	.003	13.984	.033 <sup>b</sup>
	Residual	.001	3	.000		
	Total	.004	4			
a. Dependent Variable: P						
b. Predictors:: (Constant), BVPS*FV						

By analyzing the variance in Table (1-B), we find that ( $0.033 > 0.05$  P\_value =) means that there are very significant effects of the variable (fair value) on the Relevance book value of the stock, while Table (1- C) shows the equation coefficients for the Bank of Baghdad, as well as defining the estimated equation for the transactions, as follows:

Table (1-C) Regression equation coefficients for the Bank of Baghdad

Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients	t	Sig.
		B		
1	(Constant)	1.032	24.288	.000
	BVPS*FV	35.033	3.739	.033
a. Dependent Variable: P				
Source:SPSS				

It is noted that the value of the regression coefficient of the book value of the share according to the fair value is (35.033) which is a positive value. This means that an increase of one unit of the book value share according to the fair value contributes to an more to in the share price with the value of the regression coefficient with a significant effect (0.033), as in the following equation:

$$P = 1.023 + 35.033 \text{BVPS} * \text{FV}$$

## 2. The effect of the fair value of the Commercial Bank of Iraq on the Relevance book value per share.

Table (2-A) of the Commercial Bank of Iraq

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.891 <sup>a</sup>	.794	.726	.0185457
a. Predictors: (Constant), BVPS* FV				
Source:SPSS				





through the summary of the results in Table (2-A), it is noted that the correlation coefficient between the variables ( $R = 0.891$ ) and the degree of diagnosis of the model amounted to (79%), and this means an explanation of (79%) of the changes that affect (Relevance book value of the stock). It goes back to (fair value) and the period value of the share explained the changes that occurred in the average share price during the period of dependence on the fair value, and 21% of the changes were not diagnosed.

And the following table (2-B) shows the analysis of variance for the Commercial Bank of Iraq.

**Table (2-B) Analysis of variance for the Commercial Bank of Iraq**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	1	.004	11.586	.042 <sup>b</sup>
	Residual	.001	3	.000		
	Total	.005	4			
a. Dependent Variable: P						
b. Predictors: (Constant), BVPS* FV						
Source:SPSS						

Table (2-B) reflects the probability value amounted to (0.042), which is less than the acceptable error of (05.0), which means that there is a slight significant effect of the independent variable, the fair value, on the Relevance of the book value of the share of the Commercial Bank of Iraq.

As for the table (2-C) that reflects the regression equation coefficients for the Commercial Bank of Iraq

**Table (2- C) Regression equation coefficients for the Commercial Bank of Iraq**

<b>Coefficients<sup>a</sup></b>				
Model		Unstandardized Coefficients	t	Sig.
		B		
1	(Constant)	-.189-	-2.826-	.066
	BVPS* FV	.169	3.404	.042
a. Dependent Variable: P				

Source:SPSS

From the table (2-C) it is clear that the value of the coefficient (BVPS \* FV) is (0.169), which is a positive value, which indicates an increase in the average share price with an increase in the book value of the share according to the fair value and according to the following estimated equation:

$$P = -0.189 + 0.169BVPS * FV$$

- 3. The effect of the fair value of the Middle East Investment Bank on the Relevance book value of the stock.**



Table (3-A) summary of the main indicators of the Middle East Investment Bank

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.91 <sup>a</sup>	.824	.766	.144427
a. Predictors: (Constant), BVPS*FV				

Source:SPSS

Table (3-A) shows that the value of the binary correlation coefficient (R) between the two variables is (0.91), while the coefficient of determination was  $0.82 = R^2$ . This means that (0.82) was explained by the alter in the Relevance book value of the stock prices of the Middle East Investment Bank.

Table (3-B) variance analysis for the Middle East Bank

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.294	1	.294	14.082	.033 <sup>b</sup>
	Residual	.063	3	.021		
	Total	.356	4			
a. Dependent Variable: P						
b. Predictors: (Constant), BVPS*FV						
Source:SPSS						

The

probabilistic value in the analysis of variance was ( $0.033 > 0.05 = P\_value$ ), that is, there are significant effects of the book value of the shares at the fair value on the average share price.

$$P=1.055+15.977 \text{ BVPS*FV}$$

#### 4. The effect of the fair value of Khaleeji Commercial Bank on the book value of the stock.

Table (4-A) summary of the main indicators of Khaleeji Commercial Bank

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.902 <sup>a</sup>	.813	.751	.195822
a. Predictors:: (Constant), BVPS* FV				

Source:SPSS



Through Table (4-A), it is clear that the correlation coefficient between the variables is (0.902), and the coefficient of determination is (81%), and this ratio means that (81%) of the change in the average share price variable has been explained by the change in the book value. per share at fair value.

Table (4-B) shows the analysis of variance for Khaleeji Commercial Bank as follows:

**Table (4-B) analysis of variance for Khaleeji Commercial Bank**

ANOVA <sup>A</sup>						
MODEL		SUM OF SQUARE S	DF	MEAN SQUARE	F	SIG..
1	REGRESSION	.501	1	.500	13.050	.036 <sup>B</sup>
	RESIDUAL	.115	3	.038		
	TOTAL	.615	4			
A. DEPENDENT VARIABLE: P						
B. PREDICTORS:: (CONSTANT). BVPS* FV						

Source:SPSS

Table (4-B) reflects that the probability value (0.036) is less than the acceptable and predetermined error (0.05), and this indicates the presence of significant effects of the book value according to the fair value on the dependent variable (the average share price), as for the table (4-C). It shows the regression coefficients of the bank, which reflect the following:

The value of the regression coefficient (BVPS \* FV) is (12.534), which is a negative value that indicates a decrease in the book value per share with a rise in the average share price when the effect of morality is (0.036), and from the analysis of the regression coefficients, the estimated equation for the variables can be written as follows:

$$P=1.561-12.534BVPS* FV$$

**Table (4-C) regression coefficients for Khaleeji Commercial Bank**

Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients	t	Sig.
		B		
1	(Constant)	1.561	9.968	.002
	BVPS* FV	-12.534-	-3.612-	.036
a. Dependent Variable:: P				
Source:SPSS				



**5. The effect of the fair value of the Investment Bank of Iraq on the Relevance book value per share**

Table (5-A) summary of the main indicators of the Investment Bank of Iraq

Model Summary				
Model	R	R Square	Adjusted R Square	Std.. Error of the Estimate
1	.883 <sup>a</sup>	.780	.707	.570746
a. Predictors:: (Constant), BVPS* FV				
Source:SPSS				

From Table (5-A), it is clear that the correlation between the variables was (0.883), and the diagnosis or determination coefficient was (78%), and this indicates that the value of (78%) of the changes in the average share price was explained by the book value per share according to The fair value, and the remaining (22%) represents random errors that have not been diagnosed, and (5-B) reviews the table of variance analysis of the Investment Bank of Iraq.

Table (5-B) Variance Analysis of the Investment Bank of Iraq

ANOVA <sup>A</sup>						
MODEL		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG..
1	REGRESSION	3.463	1	3.463	10.629	.047 <sup>B</sup>
	RESIDUAL	.977	3	.326		
	TOTAL	4.440	4			
A. DEPENDENT VARIABLE: P						
B. PREDICTORS: :(CONSTANT), BVPS* FV						
Source:SPSS						

Table (5-B) displays the probabilistic value of (0.47), which is less than the accepted error predetermined by (0.05), and thus there are slight significant effects of the book value per share at the fair value on the variable (the average share price).

As for Table (5-B) showing the regression equation coefficients for the Investment Bank of Iraq, the result was:

The value of the variable regression coefficient (BVPS \* FV) was (61.435) inversely related to the average share price, and the estimated equation is formulated as follows:

$$P=3.437-61.1435 \text{ BVPS* FV}$$

Table (5-C) Regression equation coefficients for the Investment Bank of Iraq



Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients	t	Sig.
		B		
1	(Constant)	3.437	6.808	.006
	BVPS* FV	-61.435-	-3.260-	.047
a. Dependent Variable:: P				

Source:SPSS

According to the statistical analysis, the fair value affected the Relevance of the book value per stock, as the explanatory power increased with the application of the fair value in the banks of the research sample.

### Conclusions

1. Reliance on fair value leads to providing better information about the financial status of economic units and thus provides transparency that enhances the economy's resilience in the face of changes in economic turmoil, as well as providing Relevance information to users that helps them make rational decisions and evaluate the performance of the economic unit in a way that exceeds historical cost measurement and disclosure.
2. The fair value affects the Relevance of the book value per share, as the descriptive power of the figures increases with the application of the fair value, Where the explanatory power of the accounting figures with the application of the fair value of Iraqi banks (82%,79%,82%,81%,78%) respectively

### Recommendations

The study sample banks should do the following

1. Continuous follow-up of the availability of accounting information that has value relevance value as it interprets the numbers contained in the financial statements and helps users of those data to make Relevance decisions through its ability to explain and interpret stock prices in the financial market.
2. Paying more attention to disclosing the fair value and striving to adhere to the application of international financial standards that contribute to achieving the quality of information whose effects are positively reflected on future performance and the Relevance of the value of accounting information.
3. It is necessary to use fair value in accounting measurement because of its ability to show information that reflects the true value of the unit, especially in the period of price fluctuations.



## References

- [1] Keener, M.H., The relative value relevance of earnings and book value across industries. *Journal of Finance and Accountancy*, 2011. 6: p. 1.
- [2] Menini, A., M. Magnan, and A. Parbonetti, Fair value accounting: Information or Confusion for financial markets? 2011, CIRANO.
- [3] Thesing, J. and P. Velte, Do fair value measurements affect accounting-based earnings quality? A literature review with a focus on corporate governance as moderator. *Journal of Business Economics*, 2021: p. 1-40.
- [4] Al-Aal, H.T.A., The Modern Approach to Accounting.
- [5] Young, M.R., Fair Value Roundtable. *Journal of Accountancy*, 2008. 205(6): p. 60.
- [6] Al-Salam, A., et al., The effect of applying fair value on the valuation of financial assets. 2019, Ahmed Deraya University - Adrar.
- [7] Ismail, et al., The applicability of fair value models in measuring the real value of common stocks. 2016.
- [8] Ismail, AEI, The impact of using fair value as a basis for measurement, disclosure, and auditing on achieving the quality of accounting information. 2016, Sudan University of Science and Technology.



- [9] [https://ar.wikipedia.org/wiki/%D8%B3%D9%88%D9%82\\_%D8%A7%D9%84%D8%B9%D8%B1%D8%A7%D9%82\\_%D9%84%D9%84%D8%A3%D9%88%D8%B1%D8%A7%D9%82\\_%D8%A7%D9%84%D9%85%D8%A7%D9%84%D9%8A%D8%A9%D8%AE%D9%84%D9%81%D9%8A%D8%A9](https://ar.wikipedia.org/wiki/%D8%B3%D9%88%D9%82_%D8%A7%D9%84%D8%B9%D8%B1%D8%A7%D9%82_%D9%84%D9%84%D8%A3%D9%88%D8%B1%D8%A7%D9%82_%D8%A7%D9%84%D9%85%D8%A7%D9%84%D9%8A%D8%A9%D8%AE%D9%84%D9%81%D9%8A%D8%A9)