



# Impact of Investment Decision, Liquidity Management, and Leverage Ratio on the Value of Manufacturing Companies

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## ABSTRACT:

This study examines how investment decisions, liquidity management, and leverage affect the value of manufacturing companies listed on the Iraqi Stock Exchange from 2019 to 2023. where the independent variables are measured by each of the Total Asset Growth Ratio (TAGR), Net Working Capital Ratio (NWCR), and Debt to Equity Ratio (DTER), versus the dependent variable, which is measured by Price-to-Book Value Ratio (PBVR). Using the audited financial lists of 17 manufacturing companies, purposive sampling was done to obtain the data. A fixed effect model was used to analyze their data's cross-sectional characteristics (PLS) with the help of EVIEWS software 12. The results indicate that the debt-to-equity ratio (DTER) has a significant positive effect on the Price-to-Book Value Ratio (PBVR). However, the Net Working Capital Ratio (NWCR) has a non-significant negative impact on the PBVR. Meanwhile, Total Asset Growth Rate (TAGR) has a significant positive impact on (PBVR). According to the findings of the study, they suggest that manufacturing firms should consider market conditions and industry type when reformulating their annual plans. The financial performance of the company must be evaluated regularly in order to identify potential improvements and responses to possible future problems. Companies should emphasize achieving sustainable growth and increasing corporate value by developing more appropriate investment strategies and understanding how the debt-to-equity ratio (DTER) and total asset growth rate (TAGR) affect PBVR.

**Keywords:** Investment Decision, Total Asset Growth Ratio, Net Working Capital Ratio, Debt to Equity Ratio, Corporate Value.



## 1 INTRODUCTION

A business's primary goal is to grow in value and remain viable in any competitive environment. By focusing on their financial operations and activities, corporations must continuously improve their competitiveness to maintain or gain a competitive advantage in local and international markets. The theory of companies states that a company's primary goal is to maximize its value, considering factors such as increasing assets, profit distribution for shareholders, and the book value of shares.

Investment decisions significantly affect the value of a company by allocating funds to achieve the company's short- and long-term goals. The right investment decisions generate future benefits and profits, promoting business development and potentially increasing the company's share price, ultimately increasing its value [1,2]. The study uses the Total Asset Growth Rate (TAGR) to measure investment decisions, as the increase in asset growth significantly affects investment results [3]. The strategies and policies of effective managers are influenced by factors such as liquidity, capital structure, asset size, and revenue growth, which can be long-term or short-term. The net working capital ratio NWCR is also used as a benchmark to measure liquidity management. [4]. Leverage is also measured by the debt-to-equity ratio DTER of companies. This refers to the ability to repay long-term and short-term debt. It involves the use of fixed assets to increase income, thereby meeting its debt obligations [5].

The value of the company serves as a benchmark for investors and managers, ensuring shareholder welfare and maximizing management satisfaction. Price-to-Book Value Ratio (PBVR) has also been used to measure the value of manufacturing firms in Iraq, as higher stock prices indicate greater value for the company, benefiting shareholders. Investors or shareholders typically calculate company ratios such as liquidity management, leverage ratio, and profitability before buying shares [6].

The problem identification in this study is whether the investment decision (total asset growth ratio), liquidity management (net working capital ratio), and leverage ratio (debt-to-equity ratio) affect the value of companies (price-to-book value ratio) of manufacturing firms on the Iraqi Stock Exchange for the period 2019 to 2023. How large is the partial effect of each independent variable on the dependent variable? Based on the current results and empirical studies described in the literature review.

The main objective of this research is to empirically determine and assess the impact of investment decisions, liquidity management, also leverage ratios to the firm value of manufacturing companies listed on the Iraqi Stock Exchange. Specifically, it is to determine the combined effect of the total asset growth ratio (TAGR), the net working capital ratio (NWCER), and the debt-to-equity ratio (DTER) on the corporate value (CV) of manufacturing companies in Iraq [7]. This study examines the impact of the growth ratio of total assets, net working capital ratio and debt-equity ratio on the corporate value of manufacturing companies in Iraq.

## 2 LITERATURE REVIEW

### 2.1 SIGNALING THEORY

Brigham and Houston (2011) revealed that signal theory indicates that corporate managers signal to investors how to meet investors' needs regarding how to control corporate governance. This theory provides sound guidance to investors in making use of financial information because it reflects the skill of corporate managers in systematically analyzing financial information [8]. This theory also emphasizes that principles should be observed in published financial statements. Because these reports are important for investment, they indicate the company's condition in the past, present, and future. Therefore, investors rely on it when making decisions [5].

### 2.2 EFFECT AND EFFICIENCY OF LEVERAGE RATIO ON CORPORATE VALUE

According to [9] The author's study examined that if gender diversity influences profitability, leverage ratio, and liquidity in Indonesian consumer goods manufacturing companies. Secondary data is used from annual financial reports and the 3.0 version of Smart PTS, with 180 companies listed on the Indonesia Stock Exchange (IDX) during the 2017-2023 period as a sample. Results show that profitability and leverage ratio greatly affect the value of the company, However, liquidity does not affect the company's value.

In addition, the study by [10] Investigated the impact of the current ratio, debt-to-equity ratio and return on assets on the value of automotive sub-sector companies listed on the Indonesia Stock Exchange from 2017-2021. The study revealed that the current ratio, debt-to-equity ratio and return on assets have a partial impact on the value of the company using version 9 of EViews software.

[11] have conducted an analysis of the effects of debt-to-equity ratios, return on equity, and liquidity on the value of Indonesian mining companies, during the period from 2012 to 2021. samples were taken from 4 companies that fulfilled the criteria, with 10 years of observation with a total of 40 sample units. The research that used the method of taking targeted samples from 4 companies found that financial performance and partial liquidity had no significant impact on the value of the company, which indicates that the financial performance did not significantly affect the value of the company.

Furthermore, the study by [12] examines the impact of the cash ratio, debt-to-equity ratio and sales growth on company value in 20 Indonesian food and beverage companies listed on the Indonesian Stock Exchange between 2015-2021. Using the STATA 16 software, the results show that cash ratios are positively affected by these variables, while the value of the company remains unaffected.

The study by [13] aimed to analyze the impact of ROE and LR on company value in PT. Indorama Tbk. Using descriptive analysis and quantitative approach, using SPSS version 26. The results showed that the partial leverage ratio did not have a positive impact on the value of the company, suggesting that companies must improve their performance to achieve profits and face increasing global competition, the hypothesis of the study can be carried out as follows:

**H1:** *The debt-to-equity ratio (DER) significantly and positively impacts Price-to-Book Value Ratio.*

## 2.3 EFFECT AND EFFICIENCY OF LIQUIDITY MANAGEMENT ON CORPORATE VALUE

According to a study conducted by [14] analysed the effect of liquidity management on the profitability of 18 Bangladeshi public banks listed on the Dubai Securities Exchange over a five-year period from 2013 to 2017, using cash deposit, credit deposits and investment deposit ratios to measure liquidity management, while profitability was measured by return on assets and return on equity. The results discover the effect of liquidity management on profitability and discover efficiency in liquidity management. Additionally, a study of Nigerian Deposit Money Banks (DMBs) found that liquidity management positively affects their financial performance. Data was collected from the individual financial reports of twelve (12) banks for listed deposit money in Nigeria, during the research period from 2011 to 2020. Good capital adequacy leads to lower credit weakness and increased profitability [15]. And, the study by the author [16] examined the impact of liquidity management on the financial performance of 21 Nigeria-listed consumer goods companies (CGCs), focusing on fifteen companies based on their capital bases, ten-year data readiness (2014-2023), and listing in NGX. The results show that liquidity management significantly impacts Nigeria's consumer goods sectors.

On the other hand, the study by the authors [17] looked at the impact of liquidity management on the financial performance of the Indonesian consumer cyclical sector, which is the 50 companies listed on the Indonesian Stock Exchange (IDX) starting the study period from 2019 to 2023. The results showed that none of the liquidity variables significantly affected the return on capital used. Also, the study analyses the relationship between profitability, liquidity, leverage, and company value in 36 manufacturing companies from 2018 to 2020, and found that dividend policy significantly affects company value, while liquidity and leverage do not have significant effects [18]. The study hypothesis can be carried out as follows:

**H2:** *The net working capital ratio (NWCAR) significantly and positively impacts Price-to-Book Value Ratio.*

## 2.4 EFFECT AND EFFICIENCY OF INVESTMENT DECISIONS ON CORPORATE VALUE

The study by [19] showed that the investment efficiency of Asian stock exchange companies, including 9,218 Asian companies, from 2012 to 2019 has improved through the performance of corporate sustainability, underscoring the importance of economic and environmental decisions in raising company value. In addition, the study looks at how investment efficiency affected the value of 177 companies listed on the Tehran Stock Exchange from 2014 to 2021. It was found that the value of a company is significantly influenced by investment efficiency, with board independence and institutional ownership having little impact. Since these properties have not been examined before, the study emphasizes the need for additional research on them [20]. Also, the study explores the impact of financial data quality on company value and investment efficiency, and revealed that overinvestment and underinvestment mediate the impact of quality reporting, through the use of 82 companies and 284 observations of the Indonesian stock exchange during the 2018-2020 research period [21].

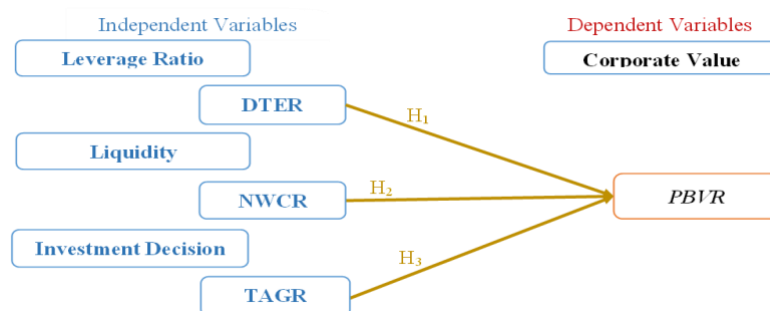
However, the study conducted by [22] analyzed data from 11 Indonesian companies using SPSS version 21, focusing on investment decisions and dividend policies. Results showed that partial investment decisions significantly impact a company's value, while profit distribution policy had no significant impact. The study highlights the importance of these factors in a company's value. And, the study by [1] of 30 Indonesian manufacturing companies from 2015 to 2019, found that dividend policy, investment decisions, leverage, profitability and company size did not significantly affect the value of the company, using the purposeful sampling method, the study hypothesis can be carried out as follows:

**H3:** *The total asset growth ratio (TAGR) significantly and positively impacts Price-to-Book Value Ratio.*

## 3 RESEARCH DESIGN AND METHODOLOGY

### 3.1 RESEARCH METHODOLOGY AND DATA COLLECTION

In his study, the impact of investment decisions, liquidity management, and the Leverage Ratio on the value of manufacturing companies in Iraq for the period (2019-2023). The quantitative method is used to extract the effect of each of the independent variables, Total Asset Growth Rate (TAGR), Net Working Capital Ratio (NWCAR), and Debt-to-Equity Ratio (DTER), on the dependent variable, firm value, measured by Price-to-Book Value Ratio (PBVR). Using the post-audit annual financial statements of 17 manufacturing companies available on the Iraqi Stock Exchange for the years 2019 to 2023, which contained all the variable requirements of the study. Out of a total of 28 companies listed on the stock exchange. At the same time, a purposive sampling method has been followed to analyze the corporate panel data. Fixed regression approaches using EViews 12 to infer the relationship between the independent variables of Total Asset Growth Rate (TAGR), Net Working Capital Ratio (NWCAR), and Debt to Equity Ratio (DTER) on the dependent variable measured by Price-to-Book Value Ratio (PBVR) were used to analyze their data cross-sectional specification (PLS). To show the relationship between the variables of the study, this model was used, in which each of the researchers [22, 23, 24] and [26] Applied to data from different sectors in different periods, despite the differences in the regions where the studies were conducted [27]. (<http://www.isx-iq.net>).



**Figure 1. Theoretical Model of the Study**

Source: Conceptualized by the Researchers, 2025

### Model:

$$PBVR = \alpha + \beta_1 TAGR + \beta_2 NWCR + \beta_3 DTER + e \dots \dots \dots (1)$$

#### Description:

*PBVR: Price-to-Book Value Ratio (Dependent variables).*

*TAGR: Total Asset Growth Ratio (Type of Independent Variables).*

*NWCR: Net Working Capital Ratio (Type of Independent Variables).*

*DTER: Debt to Equity Ratio (Type of Independent Variables).*

*Total Assets t: Total Assets for current year firm t.*

*Total Assets t-1: Total Assets lagged one year.*

*$\alpha$ : Constants.*

*$\beta_1, \beta_3$ : Partial Coefficient Regression*

*e: Error*

## 3.2 RESEARCH VARIABLES

### 3.2.1 TYPE OF DEPENDENT VARIABLES

#### 3.2.1.1 PRICE-TO-BOOK VALUE RATIO

The Price Book Value Ratio (PBVR) is used as a benchmark to measure company value. This ratio is used to evaluate the market price of shares. This shows the ability of companies to appropriately implement a modern management system in all parts of the organization [23]. To find the result of this ratio, we also divide the market price per share by the book value of equity per share during a financial year [27, 28].

$$PBVR = \frac{\text{Market Price per Share}}{\text{Book Value of Equity Per Share}} \dots \dots \dots (2)$$

### 3.2.2 TYPE OF INDEPENDENT VARIABLES

#### 3.2.2.1 TOTAL ASSET GROWTH RATIO

Total Asset Growth Rate (TAGR) is used as a benchmark for measuring investment decisions in manufacturing companies in Iraq. This ratio indicates the active performance of companies to what extent their assets have grown properly as a result of proper management compared to the assets owned by the company in the previous year. To find this result, the total assets of the current year minus the total assets of the previous year are divided by the total assets of the previous year during a financial year [30].

$$TAGR = \frac{(\text{Total Assets } t - \text{Total Assets } t - 1)}{\text{Total Assets } t - 1} * 100 \dots \dots \dots (3)$$

### 3.2.2.2 NET WORKING CAPITAL RATIO

Effectiveness ratio, which is one of the independent variables measured by Net Working Capital Ratio (NWCR). in order to indicate the proportion of capital owned by the company against its liabilities [30, 31]. In order to find the result of this ratio, it is necessary to total current assets minus total current liabilities and then divide by total assets during a financial year [4].

$$NWCR = \frac{(Total\ Current\ Assets - Total\ Current\ Liabilities)}{Total\ Assets} * 100 \dots \dots (4)$$

### 3.2.2.3 DEBT TO EQUITY RATIO

The debt-to-equity ratio (DTER) has been used as a measure of Leverage Ratio in manufacturing companies in Iraq. This ratio is used to assess the capital structure of companies the ratio of how much they rely on debt versus shareholders' equity. To find the result of the ratio of debt to equity by dividing the total current liabilities by the shareholder's equity of the company during a given financial year [33].

$$DTER = \frac{Total\ Liability}{Total\ Equity} * 100 \dots \dots (5)$$

## 4 RESULTS AND DISCUSSION

### 4.1 STATISTICS, DESCRIPTIVE

The results presented in Table 1, which refer to descriptive statistics among its independent variables, are as follows: Total Asset Growth Rate (TAGR), Net Working Capital Ratio (NWCR), Debt-to-Equity Ratio (DTER), and Price-to-Book Value Ratio (PBVR). The (TAGR) results point to a median of 1.30, representing an average total assets growth rate of 130%. This is, although the mean result of -1.08, which is also close to 0, indicates that the growth rate of most firms in the manufacturing sector is very low or close to zero in terms of total assets owned. However, the maximum and minimum results indicate 0.16 and -3.62, with a standard deviation of 0.77, indicating a 77% variation in the intercompany growth rate. Net Working Capital Ratio (NWCR) results show their average net working ratio is approximately 48%, with a mean value of 0.48. Against the median value of -0.32, this result also shows that firms rely more on net capital. However, the maximum and minimum values, which are shown as -0.086 and -1.583, indicate that 8.6% of the companies have a high ratio of working capital. with a standard deviation of the value -1.583. The debt-to-equity ratio (DTER) has a mean result of -0.829, which indicates an average debt-to-equity ratio of -82.9%, which means that companies rely less on debt than equity. The median value is -0.785, with a maximum value of 0.488 and a minimum value of -1.948. This result indicates that some companies have a very small amount of debt reliance on their shares, which is close to zero. against a high standard deviation with a value of 0.472. The results of the Price-to-Book Value Ratio (PBVR) indicate a maximum value of 2.00 and a minimum value of -0.44, with a standard deviation of 0.515 and a mean value of 0.425 against a median value of 0.30, which result also indicates a median value much lower than the mean. That is, many companies have a PBVR of around 2, but some have a very high ratio.

**Table 1. Descriptive statistics**

	TAGR	NWCR	DTER	PBVR
Mean	1.304175	0.483649	-0.829065	0.425625
Median	-1.087155	-0.322371	-0.785845	0.301030
Maximum	0.161042	-0.086964	0.488422	2.000000
Minimum	-3.622117	-1.583582	-1.948586	-0.443697
Std. Dev.	0.770163	0.364421	0.472786	0.515592
Skewness	-0.760669	-1.072156	-0.185385	1.152692
Kurtosis	3.161676	3.478152	3.544541	4.229086
Jarque-Bera	8.289654	17.09457	1.537066	24.17346
Probability	0.015846	0.000194	0.463693	0.000006
Observations	85	85	85	85

*Source: EViews Version 12 data processing.*

### 4.2 RESULTS OF CORRELATION

The results presented in Table 2 show the relationship between independent and dependent variables. There is a weak negative relationship between Dter and PBVR, worth -0.179, while statistically significant at a level of 1%. In other words, the increase in the share of loans to shares will lead to a minor change in the price of books in industrial companies. Through this result, there is a significant positive relationship with the 0.2048 value between NWCR as an independent variable and PBVR. This result indicates that as the amount of clean operating capital increases, it causes the price increase in books. That is, this statistical relationship is important at the level of 5% (\*\*), and at the same time, this relationship is not due to random but to moderate relationships. In addition, there is a significant positive



relationship between TAGR and PBVR, worth 0.108. This result also indicates the further growth of companies in the total wealth in the face of the increase in the value of books. This important statistical relationship is at the level of 1% (\*\*\*), which indicates that it is unlikely to be random.

Additionally, Table 2 shows the degree of collinearity between the parameters under examination. The variance inflation factor (VIF), a statistical technique, is utilized to administer this test. The VIF measures how much the variance of the calculated regression coefficients is inflated in comparison to the situation where the predictor variables are not fully connected. [4] states that if the VIF is 1, the relationship between the variables is deemed unrelated; if it is between 1 and 5, it is deemed moderately related; and if it is between 5 and 10, it is deemed strongly associated. According to table 2's findings, every variable in this study is within the safe range and does not have any collinearity issues.

**Table 2. Results of Correlation**

Covariance Analysis: Ordinary					
Included observations: 85					
Correlation					
Probability					
	PBVR	NWCR	DTER	TAGR	VIF
PBVR	1.000000				
	-----				
NWCR	0.204892	1.000000			
	0.0600	-----			2.233
DTER	-0.179507	0.090296	1.000000		
	0.1002	0.0412	-----		2.352
TAGR	0.108047	-0.277566	0.287223	1.000000	
	0.1250	0.0101	0.0077	-----	2.761

*Notes: \*\*\*Significant at 10% level; \*\*Significant at 5% level; \*Significant at 1% level*

*Source: EVIEWS Version 12 data processing.*

#### 4.3 DISCUSSION OF REGRESSION RESULTS

Table 4 indicates the panel least squares (PLS) regression results. To show the effect of independent variables (DTER, NWCR, and TAGR) on the dependent variable of PBVR in manufacturing companies in Iraq from 2019 to 2023. The result of the debt-to-equity ratio (DTER) for a coefficient is 0.027314, so according to this result, it shows that one unit increase in the debt-to-equity ratio will lead to a rise in Price-to-Book Value Ratio by 0.027314. Since the p-value of 0.0262 is smaller than 0.05, this result also indicates that it is statistically significant. This result is contrary to the results of each of the studies [6, 11] and [10]. However, it has the same results as the [8] study. So, the obtained result of hypothesis 1 indicates that it leads to acceptance of (H1) versus rejection of (H0). Plus, debt-to-equity ratios indicate the extent to which firms rely on debt-to-shareholders' equity ratios in their capital structure [34, 35]. A high debt-to-equity ratio indicates that it relies on debt to provide financial resources, but a low ratio indicates the importance of shareholders' equity. However, a high book value indicates that investors are willing to pay more than the companies' shares of book value, which is the beginning of optimism for the future of the companies [29]. However, a low ratio may indicate that companies are not performing well in the labor market [28]. If companies can follow an appropriate level of debt management by repurposing that debt in investment areas, it will contribute to an increase in book value, no matter how high the debt-to-equity ratio is. Because market demand is willing to assign a higher price to the book value of the company based on the expected future earnings from those investments. Conversely, if debt is mismanaged, resulting in lower earnings, the book value may fall as a result of investor doubts about the companies' future abilities.

While the Net Working Capital Ratio (NWCR) result indicates -0.289920. That is, if the net working capital ratio increases by one, then at the same time the price-to-book value decreases by 2.35. Although it produces this result, at the same time it is statistically significant because the p-value (0.0316) is smaller than 0.05, suggesting that the effect of NWCR on PBV is statistically significant. Therefore, according to this result, (H2) indicates that the net working capital ratio (NWCR) has a significant and positive effect on the book value ratio of prices of Iraqi manufacturing firms, which is rejected versus accepting (H0). This result is contrary to the result of the study [4]. However, the results of [6] indicate that the net working capital ratio, which is a measure of liquidity, has a positive effect on firm value. This result is opposite to that of the current study, but both results are not statistically significant. However, the study [11] indicates a statistically insignificant negative effect. while the negative correlation between (NWCR) and (PBVR).

which is statistically significant. It cannot be absolutely certain whether it is a genuine relationship. It is possible that variables not mentioned in the context of the model influence the relationship [33].

However, the total asset growth rate (TAGR) results for price-to-book value indicate a significant positive effect. This is statistically significant as the p-value is smaller than 0.05. For example, an increase in the growth rate of total assets by one lead to an increase in the Price-to-Book Value Ratio (PBVR) of 0.061094. This result gives the market an important signal to look positively at the growth rate of total assets, which will lead to an increase in stock prices. The high ratio may cause investors to be willing to pay higher prices for shares of companies that properly manage the assets they own, which in itself creates a growth environment in the future [36]. Hence, it can be more accurately indicated that the high price value of books of companies as a result of the high growth rate of total assets can be interpreted as a dividend market, especially if the company manages those assets effectively [13]. By this result is presented in Table 4, which indicates a positive relationship between the growth rate of total assets and price to book value. Similar to the results of the studies [1, 8]. At the same time, the [18] study indicates a statistically insignificant positive effect, which is indicative of the results of the study. Therefore, according to this result, (H3) refers to the Total Asset Growth Rate (TAGR), which has a significant and positive effect on the book value ratio of prices. accepted versus rejected (H0).

Finding results the study suggests how firms deal with each of the debt-to-equity ratio (DTER), net working capital ratio (NWCR), and total assets growth rate (TAGR), which can influence the price-to-book value ratio (PBVR). Investors and stakeholders care about the company's management and profitability ratio, not just one aspect. Companies that follow an appropriate management policy have a positive impact on profitability and investor decisions. This type of corporate governance also creates a balance between investment decisions, liquidity management, and the ratio of leverage to corporate value.

The R-squared result indicates 0.9491. According to this result, the changes in PBV are explained by about 94.91% of the proposed model. The high R-squared result shows that, to some extent, the data fit the model. R-squared adjusted: 0.9299 Interpretation: Approximately 92.99% of the variation in PBV can be explained by changing the number of predictors in the model. This has a lot of power. F-value = 49.4961 Interpretation: The model's overall significance is tested using the F-statistic. With a p-value of 0.0000 and a value of 49.4961, the model is considered statistically significant, meaning that at least one predictor has a nonzero impact on PBVR.

**Table 3. Regression analysis**

Dependent Variable: PBVR				
Method: Panel Least Squares				
Periods included: 5				
Cross-sections included: 17				
Total panel (balanced) observations: 85				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
DTER	0.027314	0.100241	0.272480	0.0262
NWCR	-0.289920	0.131802	-2.199665	0.0316
TAGR	0.061094	0.032092	1.903729	0.0017
C	0.387728	0.129569	2.992432	0.0040
Effects Specification				
Cross-section fixed (dummy variables)				
Period fixed (dummy variables)				
Root MSE	0.143449	R-squared	0.921671	
Mean dependent var	0.425625	Adjusted R-squared	0.892137	
S.D. dependent var	0.515592	S.E. of regression	0.169333	
Akaike info criterion	-0.480972	Sum squared resid	1.749091	
Schwarz criterion	0.208718	Log likelihood	44.44131	
Hannan-Quinn criter.	-0.203560	F-statistic	31.20733	
Durbin-Watson stat	1.779112	Prob(F-statistic)	0.000000	

*Source: EViews Version 12 data processing.*

$$\text{PBVR} = 0.387728 + 0.027314 \cdot \text{DTER} - 0.289920 \cdot \text{NWCR} + 0.061094 \cdot \text{TAGR}$$

According to the result in Table 4, presented. It is shown that the chi-square statistic with a probability value of 0.00756 is less than 0.05, this result indicating that the use of the random effect model was weak. In contrast, the fixed-effect model was used to analyze the study data. Therefore, we employed fixed-effects regression models for our analysis.

**Table 4. Fixed Effects Tests**

Redundant Fixed Effects Tests			
Equation: Untitled			
Test cross-section and period fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	37.108093	(16,61)	0.0000
Cross-section Chi-square	201.734605	16	0.0000
Period F	5.659759	(4,61)	0.0006
Period Chi-square	26.829100	4	0.0000
Cross-Section/Period F	30.275793	(20,61)	0.0000
Cross-Section/Period Chi-square	203.251155	20	0.0000

*Source: EViews Version 12 data processing.*

Heteroskedasticity test results for panel cross-section and panel period are presented in Table 5. It indicates that the likelihood ratio is 94.48837 with 17 df and a p-value of 0.0000 for the LR cross-test. This result also presented tests that reject the null hypothesis of heteroskedasticity in the study and reveal that the residuals are heteroskedastic across panels and periods.

**Table 5. Heteroskedasticity LR Test**

Panel Cross-section Heteroskedasticity LR Test			
	Value	df	Prob.
Likelihood ratio	94.48837	17	0.0000

*Source: EViews Version 12 data processing.*

According to the result presented in Table 6 for the cross-sectional dependence (CD) test, whose p-value for Breusch-Pagan LM, Pesaran scaled LM, and Pesaran CD is 0.0080, 0.0093, and 0.0265, respectively, the result shown indicates the rejection of the null hypothesis; however, CD has a substantive result.

**Table 6. Comparison of Fixed Effect Models**

Residual Cross-Section Dependence Test			
Cross-section effects were removed during estimation			
Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	178.9115	136	0.0080
Pesaran scaled LM	2.601895		0.0093
Pesaran CD	-1.134756		0.0265

*Source: EViews Version 12 data processing.*

## CONCLUSION AND RECOMMENDATION

### CONCLUSION

Corporate growth requires a lot of financial resources, so one way is to use a large percentage of debt in financing its capital structure. Therefore, Efficient use of high debt levels in profitable ventures can positively impact book value (for example, for profitable investments), it directly affects the Price-to-Book Value Ratio because investors are objectively looking to the future. But, on the contrary, if the reuse of debt is not targeted, it will lead to lower book value as it poses a risk to the future of the companies in terms of bankruptcy. At the same time, however, the low debt-to-equity ratio in firms indicates that the capital structure of firms relies on shareholders' equity in exchange for debt if it can provide the necessary financial resources for investment. It is seen as a positive point by investors because it poses less risk in terms of capital structure for the company. However, a very low debt-to-equity ratio indicates that companies have not been able to properly take into account the growth opportunities; i.e., the rate of lost growth opportunities in companies is high, which harms price declines in the book.

However, the data of the study indicate the existence of a negative relationship between the net working capital ratio and Price-to-Book Value Ratio, although it is not statistically significant. However, this result can be interpreted with caution, as there is no clear, reassuring evidence in the model to suggest that any change in the net working capital ratio affects the price-to-book value in a meaningful way.

Companies must build their capital structure appropriately. Because it is seen by investors as a sign that it will make a profit in the future. Expanding opportunities and growing assets are tools that companies can use to expand and enter new markets. On the other hand, it is a source to diversify the financial resources of the company, which can gain the



confidence of the investors in the market. Against growing assets, this point also indicates that the company is financially sound. At the same time, it can give investors a signal that the company's business is growing, which may lead to higher earnings or shares in the future. This is an optimistic idea that will lead to a higher price-to-book ratio, reflecting investor confidence in the company's growth prospects. For firms, this result implies that the market values asset growth appropriately when properly managed. On the other hand, when evaluating a company's prospects for future growth and profitability, investors can view asset expansion as a favorable indicator.

## RECOMMENDATION

The results of this study show that each of the variables, debt-to-equity ratio (DTER) and total asset growth rate (TAGR), has a significant effect on the Price-to-Book Value Ratio (PBVR). The findings of this study indicate that there is a positive relationship between the price-to-book value ratio, debt-to-equity ratio, and growth rate of total assets. This suggests that with an increase in the debt-to-equity ratio and the growth rate of total assets, there is an increase in the book value ratio. It is recommended that the management of manufacturing companies in Iraq whose data were used in this study, should be conducted. Prioritize a certain percentage of debt use in the capital structure of the company versus equity. Ensuring that current liabilities against capital are moderate does not pose a risk. Because, in the capital structure, excessive amounts of debt are not allowed. In turn, the ability to generate profits and access liquidity to meet short-term commitments to enhance the value of the company is created. At the same time, the findings of this study offer positive insights into the investment decision. That is, by proportionally enhancing profitability, which can be achieved by increasing operational efficiency, finding other sources of income, and managing assets properly. Companies should step up their profit-enhancing efforts. By developing strategies that have the potential to increase revenue and asset management efficiency.

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