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The Effect of Capital Structure on Firm Value in Banking Companies Listed on the Indonesia Stock Exchange

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Abstract: This study is to determine the effect of capital structure on firm value in banking companies on the Indonesia Stock Exchange. The data used is quantitative data. The population in this study were 8 banking companies listed on the Indonesia Stock Exchange, while the sample used in this study used the Purposive Sampling formula of 40. Data collection was carried out through documentation. The data analysis method used is the classic assumption test, regression analysis, and hypothesis testing using SPSS 23 for windows software. Based on the results of research that examines the effect of Debt-to-Equity Ratio on Price Book Value, the t value = 4.801 is greater than the t table = 2.02439, with a significance level of 0.060 greater when compared to the α = 5% level, then H1 is accepted. The constant value of 3.826 means that, if the DER variable does not change, then PBV has a value of 3.826. Meanwhile, the DER variable coefficient value of -0.262, means that if DER increases by one percent, PBV decreases by 0.262. These results indicate that statistically DER has a negative and insignificant effect on PBV in Banking Companies listed on the Indonesia Stock Exchange. Thus, the hypothesis stating that DER has a negative and insignificant effect on PBV in Banking Companies listed on the Indonesia Stock Exchange is proven.

Keywords: Debt to Equity Ratio, Price Book Value, Firm Value.

JEL Classification Code: D53, F36, G19

1. Introduction

In the era of globalization as it is now, there are many publicly listed companies in various sectors, and better economic growth has an impact on the increasingly intense competition between companies. Competition makes companies increasingly improve performance by achieving company goals to survive and be able to compete in the business world. The main objective of companies that have gone public is to increase the prosperity of the owner or shareholders through an increase in company value. Currently funding is a problem that is often faced in the business world. More and more financial institutions are experiencing bad credit resulting in the decline of the business world. In overcoming this, the company's financial manager must be careful in determining the capital structure that affects the company's value and the company's ability to face intense competition in the business world. Funding decisions that are not taken carefully will cause financial disruptions that will lead to a decrease in company profitability and ultimately have an impact on the decline in company value. This funding decision relates to the manager's policy in determining the right proportion between the amount of debt and the amount of own capital in the company to maximize company value. Companies can reduce financial risk by prioritizing own capital and reducing dependence on loan capital. However, companies also need large capital apart from their own capital to carry out business development obtained from loan capital.

Based on data published by the Indonesia Stock Exchange until September 12, 2017, 555 companies have been registered as companies (issuers) on the Indonesia Stock Exchange. Of the 555 companies, 81 banking companies have been listed on the Indonesia Stock Exchange. The

development of the economic sector that supports the smooth running of economic activity, especially finance in Indonesia is very interesting to watch. Banking companies are one of the sectors of interest to investors, the reason for choosing banking companies is because the shares of banking companies are one of the stocks that investors are interested in investing in, because the sector has the potential for growth and generates good future profits along with Indonesia's current economic growth which is increasing.

Table 1. Debt to Equity (DER) Value of Banking Companies Listed on the IDX

Issuer Code	2018	2019	2020	2021	2022
BBRI	6.89	7.21	6.76	5.84	5.73
BBNI	7.11	5.59	5.26	5.52	5.79
BBTN	10.35	10.80	11.40	10.20	11.06
BMRI	7.26	7.16	6.16	5.38	5.22
BDMN	4.84	4.93	4.50	3.79	3.51
BACA	6.88	8.50	10.54	9.80	10.13
BBCA	6.76	6.06	5.60	4.97	4.77
BBKP	10.18	10.59	11.52	10.05	10.40

Source: www.idx.co.id

Table 1 is a list of Debt-to-Equity Ratio (DER) values of several banking companies listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022. DER is a financial ratio used to measure the level of a company's debt compared to its equity. Issuer Code: Identification code for each banking company. Years 2018 to 2022: The years in which the company's DER value was recorded. DER is calculated by dividing the company's Total Debt by the company's Total Equity (Own Capital). The DER ratio gives an idea of how large the proportion of the company's debt is compared to its equity. The higher the DER, the greater the proportion of debt, and the higher the level of financial risk of the company. The results from table 1 are stated as follows: BBRI has a DER that fluctuates over five years, with the highest value in 2019 (7.21) and the lowest value in 2022 (5.73). BBNI experienced a significant decrease in DER from 2018 to 2019 but experienced a slight increase in the following years. BBTN has a high DER from 2018 to 2022, indicating a large level of debt compared to its equity. BMRI showed a consistent decrease in DER from 2018 to 2022, signaling a reduction in the proportion of its debt.

BDMN shows a consistent decrease in DER from year to year, indicating the company is reducing its level of debt relative to equity. BACA has a DER that fluctuates significantly, with a sizable increase in 2019 to 2020, but then a decrease in 2021 to 2022. BBCA shows a consistent decline in DER from 2018 to 2022, indicating the company is reducing its debt relative to equity. BBKP has a relatively high DER throughout the five years, indicating a sizable level of debt compared to its equity. The interpretation of DER should be done by considering the company's conditions and policies, as well as comparisons with other financial ratios and similar industries to gain a more comprehensive understanding of the company's financial performance. The greater the DER, the higher the financial risk of the company. The higher the DER shows the greater the total debt to total equity, this will also show the greater the company's dependence on outsiders (creditors) so that the company's level of risk is greater. While the company that experienced a decrease was PT Bank Danamon Indonesia Tbk. this is because the company used the least debt as a source of funding for the company. Low DER also has an impact on increasing changes in earnings, which has a loss effect on the company.

Table 2: Price Book Value (PVB) of Banking Companies

Issuer Code	2018	2019	2020	2021	2022
BBRI	2.94	2.49	2.04	2.68	2.73
BBNI	1.54	1.86	1.19	1.19	1.53
BBTN	1.08	0.99	1.02	1.75	1.79
BMRI	2.54	1.81	1.77	2.20	2.24
BDMN	1.31	0.90	0.98	1.70	1.75
BACA	0.64	1.25	1.10	1.10	1.07
BBCA	4.33	3.66	3.49	4.11	4.26

Issuer Code	2018	2019	2020	2021	2022
BBKP	1.01	0.84	0.63	0.54	0.59

Source: www.idx.co.id

Table 2 contains the Price to Book Value (PVB) values of several banking companies over several years. PVB is one of the financial ratios used to assess the valuation or market price of a company compared to its book value. PVB is calculated by dividing the company's Share Price by the Book Value per Share. Book value per share is the value of shareholders' equity calculated by dividing the company's equity by the number of outstanding shares. The PVB ratio gives an idea of how much the market values the company compared to its book value. If PVB > 1, the company's market price is higher than its book value, which can be interpreted as a sign of higher valuation or potential overvaluation. Conversely, if PVB < 1, the company's market price is lower than its book value, which can be interpreted as a sign of lower valuation or potential undervalued. The interpretation of table 2 regarding PVB is as follows: BBRI shows a relatively stable PVB in the range of 2 to 3 over five years. This indicates that the company's market price is within the range of several times its book value. BBNI shows a fluctuating PVB but tends to be below 2 over the five-year period. This could indicate that the market values the company at a lower valuation than its book value. BBTN shows a fluctuating PVB but tends to be below 2 throughout the five-year period. This indicates that the market may have a more conservative view of the company's valuation. BMRI shows an increasing PVB over the five years, indicating an increasing valuation or higher market price compared to its book value. BDMN shows a fluctuating PVB, but tends to be above 1, indicating the company's market price exceeds its book value. BACA shows a fluctuating PVB, but in general tends to be above 1. This indicates that the company's market price is higher than its book value. BBCA shows a relatively high and stable PVB, indicating that the company's market price far exceeds its book value throughout the five years. BBKP shows a fluctuating PVB and tends to be below 1, indicating that the company's market price is lower than its book value. Interpretation of PVB should be done by considering the condition and performance of the company as well as comparisons with other financial ratios and similar industries to gain a more comprehensive understanding of the company's valuation.

The increase in PBV level means that the more successful the company creates shareholder value and the higher the PBV, the more interested investors are in buying shares. The occurrence of an increase every year is due to an increase in stock prices and in addition due to fluctuations in net asset value (assets-debt). While the company that experienced a decrease in PBV value was PT Bank Danamon Indonesia Tbk. this is due to the decline in share prices, so that the share price is below its book value or actual value. However, the low PBV value also indicates the decline in the quality and fundamental performance of the issuer concerned. PBV also signals to investors whether the price we pay or invest in the company is too high or not if it is assumed that the company goes bankrupt suddenly because if the company goes bankrupt, its main obligation is to pay debts first, then the remaining assets are distributed to shareholders.

The banking industry has undergone major changes in recent years. The industry has become more competitive due to regulatory deregulation. Today, banks have flexibility on the services they offer, the locations where they operate, and the rates they pay for depositors' deposits. Banking sector companies have an important role in the economic system in Indonesia. Because banks are businesses in the form of financial institutions that collect funds from people who have surplus of funds and channel them back to people who lack funds, as well as provide other bank services for profit motives as well as social to improve the lives of many people (Chen et al., 2017). The existence of the banking sector catalyzes the flow of money circulation in the Indonesian economy, money from individuals as investors is collected in the form of savings and channeled in the form of debt loans to parties who need funds. This is the main purpose of banks to generate income and can reduce the risk of banks from paying dividends to investors. Nowadays, the existence of more and more banking sector companies in Indonesia has created a higher level of competition. Companies are required to improve performance to compete and exist (Suhadak et al., 2018).

Companies need capital to carry out their business activities, both from internal and external parties. In general, companies prefer internal funding in financing their business activities. Capital structure is a consideration between the use of own capital and foreign capital, where own capital is

in the form of retained earnings and share ownership, while foreign capital is in the form of debt (Pantow et al., 2015). Capital for companies is very important to be able to finance their operational activities, lack of capital can threaten the survival of a company. Liquidity for several large companies, especially the banking sector in this era of globalization, is evidence of how important it is for companies to manage their capital well to anticipate a liquidity crisis for the company. One aspect of capital management is the determination of the capital structure of a company to minimize the cost of capital and maximize the value of the company. The problem of determining the capital structure is a very important issue, where the decision is the responsibility of the financial manager (Adusei & Obeng, 2019). This is because with the right capital structure, it will be able to stabilize the company's operational activities and reduce financial risk, then with a stable state of the company, the productivity change of the company will increase. Thus, the company's profit will be able to increase the company's share price. Optimization of firm value which is the company's goal can be achieved through the financial management function, where one financial decision taken will affect other financial decisions and have an impact on firm value.

A bank is a financial intermediary institution generally established with the authority to accept money deposits, lend money, and issue promissory notes or what is known as banknotes. The word bank comes from the Italian banca, which means money changer. Meanwhile, according to the banking law, a bank is a business entity that collects funds from the public in the form of deposits and distributes them to the public in the form of credit and or other forms to improve the lives of many people. Capital structure is the composition of common stock, preferred stock, retained earnings, and long-term debt maintained by a business entity in funding assets, so it can be understood that the capital structure is a description of the form of the company's financial proportion, namely between capital owned from long-term debt and own capital which is the source of financing a company. One indicator in calculating the capital structure in a company can use the Debt-to-Equity Ratio (DER), which is the ratio between total debt to equity.

In determining the capital structure of the company, many factors influence when making capital structure decisions. In general, the factors that influence the capital decision are sales stability, asset structure, operating leverage, growth rate, profitability, tax, control, management attitude, firm size, and financial flexibility. From several factors that have influence on capital structure above, the author limits this research by taking only 3 factors, namely asset structure, company size and profitability. Asset structure is chosen because companies with large, fixed assets can use large debt as well, this is because these assets can be used as collateral so that it is easier to get access to funds. Firm value is the investor's perception of the company, which is often associated with the stock price. A high stock price makes the company value increase. Firm value can also be defined as the expected value of shareholder investment (market price of equity) and or the expected total value of the company (market price of equity plus the market value of debt or the expected market price of assets. The main objective of the company, according to the theory of the firm, is to maximize the wealth or value of the company (value of the firm). Maximizing company value is very important for a company because maximizing company value also means maximizing shareholder prosperity which is the main goal of the company.

The value of a company can be influenced by profitability. Increased profits will affect positive signals to investors that the company is profitable and is expected to be able to provide welfare to shareholders through high stock returns. Companies that can increase their corporate profits will have more opportunities to expand their business. Firm value reflects the amount of asset value owned by the company. Firm value is very important because it reflects the company's performance which can affect investors' perceptions of the company. Company value can be measured by Price Value per Book (PVB) or in Indonesian called the Price to Book Value Ratio abbreviated as PBV is an investment valuation ratio that is often used by investors to compare the company's stock market value with its book value. The explanation above shows that the theme of the influence of capital structure on firm value demands further research. This study focuses on the use of capital structure variables and firm value. This is possible to do considering some previous researchers who have the same concern with the theme of this research produce different research. Based on this explanation and seen from previous research, the authors conducted research by taking research samples in the banking sector on the Indonesia Stock Exchange. Thus, the authors are interested in conducting

research with the title "The Effect of Capital Structure on Firm Value in Banking Companies Listed on the Indonesia Stock Exchange".

2. Literature Review and Hypothesis Development

2.1. Capital Structure

Capital structure is a proportion or comparison in determining the fulfillment of the company's spending needs, whether by using debt, equity or by issuing shares (Mubeen et al., 2020). According to Saif-Alyousfi et al. (2020) capital structure is a consideration or comparison between the amount of long-term debt and equity. Capital structure is a consideration of the amount of permanent short-term debt, long-term debt, preferred stock, and common stock (Nguyen & Nguyen, 2020). So, it can be concluded that the capital structure is the proportion in determining the fulfillment of the company's spending needs, where the funds obtained use a combination or guidance of sources originating from long-term funds consisting of two sources, namely those from inside and outside the company. Fulfillment of funding needs from sources within the company (own capital) comes from share capital, retained earnings and reserves (Lim et al., 2020). If the company's funding from its own capital is still experiencing a shortage, it is necessary to consider company funding from outside, namely from debt. However, in fulfilling funding needs, companies must look for efficient alternative funding (Demirgüç-Kunt et al., 2020). Efficient funding will occur if the company has an optimal capital structure. The optimal capital structure can be interpreted as a capital structure that can minimize overall capital user costs or average capital costs, so that it will maximize firm value (Ayuba et al., 2019). The purpose of capital structure management is to combine permanent sources of funds used by the company for its operations which will maximize the value of the company itself (Adusei & Obeng, 2019). The search for an optimal capital structure is a very difficult job, because of the conflicts that lead to agency costs. Long-standing conflicts occur between shareholders and bondholders in determining the optimal capital structure of a company. So, to reduce the possibility of management bearing excessive risk on behalf of shareholders, it is necessary to include some protective limits (Ramli et al., 2019).

2.2. Capital Structure Theory

Capital structure theory is important because any change in capital structure will affect the overall cost of capital (Grosse-Rueschkamp et al., 2019). This is because each type of capital has its own capital, and the overall cost of capital will be used as the cost of rate in making investment decisions. The capital structure theory consists of:

1. Traditional approach. This approach argues for an optimal capital structure. In other words, capital structure has influence on firm value. The capital structure can be changed to obtain the optimal firm value.
2. Trade Off Theory. According to the trade off theory, the company will try to balance the benefits of funding by using debt with high interest rates and bankruptcy costs. If there is a shift in the level of financial leverage to pass the optimal capital structure point, the bankruptcy costs will exceed the tax benefits, so that the company value will decrease (Mudjijah et al., 2019).
3. Pecking Order Theory. According to the Pecking Order theory focuses on obtaining capital sources based on an order or hierarchy that is most favorable and not only based on the targeted capital structure.
4. Tax Benefits Theory. With the tax burden, it will be more profitable for the company, because part of the income tax burden will be borne by the lender/credit. In the formation of the Capital Structure, it will tend to use loan sources of funds, because the company will get tax savings (tax shield) (Grosse-Rueschkamp et al., 2019).
5. Agency Cost Theory. Possible due to differences in interests between: Company managers, shareholders and creditors related to company profits, so that an agent is needed who is expected to be able to mediate in every problem / dispute between parties more objectively. The impact

will occur agency costs / agency costs that must be borne by the company. eg: supervision costs; auditors; legal assistance etc.

6. Asymmetric Information Theory. The occurrence of asymmetric information usually occurs if there is insider ownership, namely managers where they are faster at obtaining information about the company's prospects and company operations, while investors (outside shareholders) are less quick to obtain this information, so that it will affect the speed of making investment decisions.

2.3. Company Value

Firm value is the investor's perception of the company's success rate which is often associated with stock prices (Ilmi et al., 2017). A high stock price makes the company's value high and increases market confidence not only in the company's current performance but also in the company's prospects. Maximizing company value is very important for a company because maximizing company value also means maximizing the company's main objectives. Increasing company value is an achievement in accordance with the wishes of the owners, because with increasing company value, the welfare of the owners will also increase (Weiling & Xin, 2017). According to Pombo & Taborda (2017) company value is a condition that has been achieved by a company as an illustration of public trust in the company after going through a process of activities for several years, namely since the company was founded until now. According to Xianyun et al. (2017) company value is the selling value of a company as an operating business. The excess selling value over the liquidation value is the value of the management organization that runs the company. According to Efni (2017) Company value is the company's performance reflected by the stock price formed by the demand and supply of the capital market which reflects the public's assessment of the company's performance. According to Chen et al. (2017) company value is the actual value per share that will be received if the company's assets are sold at the share price. According to Brigham and Erdhadt (2005) in Adams (2017), firm value is the present value of future free cash flow at a discount rate according to the weighted average cost of capital. Free cash flow is cash flow available to investors (creditors and owners) after considering all expenses for company operations and expenditures for investment and net current assets (Suhadak et al., 2018).

2.4. Capital Structure Theory on Firm Value

The trade-off theory explains that (assuming the target point of the capital structure is not optimum) an increase in the debt ratio in the capital structure will increase the value of the company by the tax rate multiplied by the amount of debt. Modigliani and Miller nature Zhang et al. (2018) in 1963 that by including corporate income tax, the use of debt will increase firm value. Trade-off theory explains that if the capital structure position is below the optimal point, then any additional debt will increase the value of the company (Susilo, 2018). And vice versa, if the capital structure position is above the optimal point, any additional debt will reduce the value of the company. Therefore, assuming the optimal capital structure target point has not been reached, then based on trade-off theory predicts a positive relationship to firm value.

2.5. Banking

Banking is everything related to banks, including institutions, business activities, as well as ways and processes in carrying out their business activities. Based on the provisions of Article 2 of the Banking Law, it states that Indonesian Banking in conducting its business is based on economic democracy by using the principle of prudence. The main function of Indonesian banking according to Article 3 of the Banking Law is to collect and distribute public funds. This means that banks are required to play a more active role in extracting funds from the public in the context of national development. The purpose of Indonesian banking according to Article 4 of the Banking Law is to support the implementation of national development to increase equity, economic growth, and national stability towards improving the welfare of the people. By paying attention to the principle of

prudence, it is expected that Indonesian banks in carrying out their business will protect the interests of the depositing public and support economic activities in general, even banking institutions are expected and required to be able to create national stability in the broadest sense.

2.6. Hypothesis

Hypothesis is nothing but a temporary answer to research problems that must be tested empirically. Based on the research objectives, theoretical studies, and previous research, a hypothesis can be obtained, namely, "it is suspected that capital structure has a negative effect on firm value".

3. Research Method and Materials

This research will be conducted based on the annual financial statements of banking companies listed on the Indonesia Stock Exchange at the representative office of the Indonesia Stock Exchange, namely at PT. Indonesian Stock Exchange (IDX). The population in this study are companies engaged in the Banking sector listed on the Indonesia Stock Exchange based on those contained in the Indonesia Stock Exchange (IDX) for the period 2013-2017. The sample withdrawal carried out is by using a sample design with a purposive sampling method where sample selection is carried out based on an assessment of some of the characteristics of population members tailored to the research objectives. based on the criteria, obtained a sample of 8 companies from a population of 81 banking companies. Based on the criteria, a sample of 8 companies was obtained from a population of 81 banking companies. The type of data used in this study is quantitative data in the form of annual publication financial reports published by banking companies listed on the Indonesia Stock Exchange for five consecutive years. The data source used in this research is secondary data obtained from the official website of the Indonesia Stock Exchange (www.idx.co.id). In this study the authors collected data using the documentation study method. Documentation study is a data collection technique that is not directly aimed at the research subject. Data collection techniques are carried out using documentation of secondary data, namely data collection in the form of financial reports of banking companies listed on the Indonesia Stock Exchange. The data that has been collected will be analyzed through several stages of testing. The first stage is to conduct a classic assumption test consisting of normality test, multicollinearity test, autocorrelation test and heteroscedasticity test. The second stage is to test all hypotheses proposed in this study and will be proven through the coefficient of determination test, and partial test.

Table 3: Operational Variables

Variables	Indicators	Referenccs
Capital Structure (X1)	DER = Long-term debt: Total equity	(Tambunan et al., 2019)
Company Value (Y)	PBV = Price per share: Book value per share x 100%	(Iona et al., 2020)

4. Results and Discussion

4.1. Normality Test

The normality test is used to determine whether the data population is normally distributed or not. The normality test used in this study is the One sample Kolmogrov-smirnov test using a significance level of 0.05. Data is declared normally distributed if the significance is greater than 5% or 0.05. For more details can be seen in table 4.

Table 4: Normality Test

		DER	PBV
N		40	40
Normal Parameters[a,b]	Mean	7.2002	1.9910
	Std. Deviation	2.56482	1.04066

		DER	PBV
Most Extreme Differences	Absolute	.167	.119
	Positive	.166	.119
	Negative	-.167	-.084
Test Statistic		.167	.119
Asymp. Sig. (2-tailed)		.057c	.160c

From table 4, the probability number or Asymp. Sig. (2-tailed). This value is compared with 0.05 or using a 5% significance level. The basis for decision making in the normality test, using the sig. or significance value or probability value <0.05, then the data distribution is abnormal. Sig. or significance value or probability value> 0.05, then the data distribution is normal. From table 4, the data normality test obtained the Asymp. Sig variable PBV of 0.160 is greater than 0.05, and the Asymp. Sig variable DER 0.057 is greater than 0.05 so it can be concluded that the PBV and DER variables are normally distributed.

4.2. Autocorrelation Test

This assumption test aims to determine whether in a linear regression model there is a correlation between confounding errors in period-t and errors in period t-1 (previous). If there is a correlation, it is called an autocorrelation problem.

Table 5. Autocorrelation Test Results

Model	R	R Square	Adjusted R square	Std. Error of the Estimate	Durbin-watson
1	.614a	.378	.361	.87328	2.186

From the output results, the DW value generated from the regression model is 2186. Meanwhile, from the DW table with a significance of 0.05 and the amount of data n (40), and k = 1 k (is the number of independent variables) (40 - 1) = 39, the dL value is 1.4347 and dU is 1.5396 Because the DW value (2.186) is outside the dL and dU regions, it produces a definite conclusion (in no doubt). From the test results produced by SPSS above, it can be seen in the Durbin-Watson (D-W) column that the value is 2.186 (-2 < D-W < +2). So, it can be concluded that the regression model does not occur autocorrelation.

4.3. Correlation Coefficient Test (R^2)

This analysis is used to determine the proportion of the contribution of the independent variable DER (X), to the dependent variable PBV (Y). In table 6, the correlation coefficient (R) = 0.614, indicating that the correlation between the independent variable and the dependent variable is closely related and has a positive value and is close to the dependent variable.

Table 6: Correlation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.614[a]	.378	.361	.87328

Table 6 shows the value of the coefficient of determination (R2) = 0.378, which indicates that the variation of PBV (Y) in Banking Companies listed on the IDX can be explained by the DER variable (X), amounting to 37.8%, while the remaining 62.2%, is influenced by other factors not included in this study.

4.4. Hypothesis Test

To determine the effect of the independent variable, namely the DER variable (X), on PBV (Y) in Banking Companies listed on the Indonesia Stock Exchange. Researchers use the t test as a tool to test the hypothesis.

Table 7. Regression Coefficients

		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std. Error	Beta		
1	(Constant)	3.826	.416		9.194	.000
	DER	-.262	.055	.614	4.801	.060

Table 7 shows that the regression equation:

$$Y = \beta_0 + \beta_1 X_1 + e \text{ or } Y = 3.826 + (-0.262) X_1$$

The constant value of 3.826, means that, if the DER variable does not change, then PBV has a value of 3.826. The DER variable coefficient value of -0.262, means that if DER increases by one percent, PBV decreases by 0.262.

4.5. Discussion

In 1958 Modigliani and Miller (MM) showed that the value of a company is not affected by the capital structure, the evidence is based on a series of assumptions, among others, no brokerage costs, no taxes, no bankruptcy, investors can borrow at the same interest rate as the company, all investors have the same information, EBIT is not affected by the cost of debt. These results show the conditions under which capital structure is irrelevant. MM also provides guidance so that the capital structure becomes relevant so that it will affect the value of the company. In 1963 MM published a follow-up paper that weakened the assumption of no corporate tax. Tax regulations allow the deduction of interest as an expense, but dividend payments to shareholders cannot be deducted. The results encouraged companies to use debt in the capital structure. This conclusion is modified by Miller when entering the effect of corporate tax. Miller argues that investors are willing to accept a relatively low take on pre-tax shares compared to the take on pre-tax bonds. The results show that statistically DER has a negative and insignificant effect on PBV in Banking Companies listed on the Indonesia Stock Exchange. Thus, the hypothesis stating that DER has a negative and insignificant effect on PBV in Banking Companies listed on the Indonesia Stock Exchange is proven. DER has a negative and insignificant effect on PBV, it means that the higher the use of debt to finance the company's operations, the burden borne by the company is also large, thus reducing the company's value. According to trade-off theory, in relation to the optimal use of debt to increase value in this study may not be optimal. This possibility can be caused because the company has not maximized the tax shield benefits of additional debt so that the use of debt has not reached the optimal point.

Therefore, optimizing debt (DER) will increase firm value. This finding also supports the capital structure theory which states that if the company can balance, the benefits and costs caused by debt will not be a problem. Thus, high DER but followed by good management can increase profits and initial returns. The results of this study are in accordance with the results of research conducted by Tri Pujianti (2017) which states that the capital structure as measured by DER has a negative and insignificant effect on firm value. The results of this study are also in accordance with research from Eli Safrida (2008) and Husnayen Tami (2015) which state that capital structure has a negative and significant effect on firm value. There are several possibilities to explain these results, namely 1) The sample of this study only used 8 banking companies from all banking companies listed on the Indonesia Stock Exchange so that the results did not describe or represent the population. 2) DER has a negative and insignificant effect on PBV, which means that banking companies use debt greater than their own capital.

5. Conclusion

In conclusion, the analysis of several financial ratios provides insights into the financial performance of PT Semen Indonesia (Persero), Tbk. The analysis focused on the gross profit margin, net profit margin, return on assets (ROA), and return on equity (ROE) for the years 2020-2022. Here are the key findings:

1. Gross Profit Margin: The company's gross profit margin showed a declining trend over the years. In 2020, the gross profit margin was 39.5%, which decreased to 37.7% in 2021 and further dropped to 28.6% in 2022. This indicates a decrease in the profitability of the company's core operations and may be attributed to various factors such as increased costs or changes in pricing strategies.

2. Net Profit Margin: The net profit margin also exhibited fluctuations during the analyzed period. In 2020, the net profit margin was 16.7%, which slightly increased to 17.3% in 2021 but then significantly dropped to 7.3% in 2022. This indicates a decline in the company's ability to convert sales into net profit, which could be a result of higher expenses or changes in market conditions.

3. Return on Assets (ROA): The ROA measures the efficiency of asset utilization to generate profits. PT Semen Indonesia's ROA was 11.8% in 2020, decreased to 10.2% in 2021, and further declined to 4.1% in 2022. This indicates a reduced ability of the company to generate profits relative to its total assets. The decline may be attributed to factors such as lower net income or an increase in total assets.

4. Return on Equity (ROE): The ROE reflects the company's ability to generate profit from shareholders' equity. PT Semen Indonesia's ROE was 16.4% in 2020, decreased to 14.8% in 2021, and significantly dropped to 6.7% in 2022. The declining trend indicates a decrease in the company's profitability relative to the equity invested by shareholders.

Overall, the financial ratios suggest a mixed performance for PT Semen Indonesia (Persero), Tbk. The company experienced declining profitability, as reflected by decreasing gross profit margin, net profit margin, ROA, and ROE. It is crucial for the company to assess the factors contributing to these declines and take appropriate measures to improve operational efficiency, reduce costs, and enhance profitability. Additionally, close monitoring of market conditions and competition is necessary to ensure sustainable financial performance in the future.

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