The Role of Leverage as A Mediating Influence Between Profitability and Firm Size on Firm Value

Herda[1]*, Tubagus Ismail[2], Wulan Retnowati[3]
Universitas Sultan Agung Tirtayasa
Corresponding Author: Herda herda_sulaiman@yahoo.co.id

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ABSTRACT

This research is conducted to investigate the influence of Profitability and Firm Size on Firm Value using Leverage as a variable of mediating. This research employs a quantitative approach and secondary data. The population consists of industrial sector companies listed on the Indonesia Stock Exchange Index Classification (BEI-IC) during the 2018-2022 period, with a sample selected using purposive random sampling, totaling 110 companies. The data is analyzed using multiple linear regression analysis The outcomes of this research are (1) Profitability gives a significant effect on Leverage. (2) Firm Size leaves out a significant effect on Leverage. (3) Profitability constructs a significant effect on Firm Value. (4) Firm Size does not have a significant effect on Firm Value. (5) Leverage has a significant effect on Firm Value. (6) Leverage works as a mediating variable between the significant influence of profitability on firm value. (7) Leverage as a mediating variable between the significant influence of firm size on firm value

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INTRODUCTION

In the context of an increasingly advanced economy and the rapid development of technology, the competition among companies has become more intense and complex that every firm is required to continue to grow and be able to maintain its existence. Every firm must put its effort to achieve its goals. A firm's goals are divided into two: short-term goals to increase corporate surplus and the long-term goal to maximize the firm's value. A firm's value is an investor's assessment of a firm's success, often associated with its stock price. If the stock price is relatively high, it provides significant value for the firm and strengthens investor confidence in the firm's future prospects and current development. Efforts to maximize a firm's value is essential in achieving the firm's main objective. When considering a firm's value, investors must not overlook the annual financial statements as information reflecting the firm's performance. Investors execute extensive analyses related to their decisions to invest in the firm.

The optimization of a firm's value is heavily influenced by access to both external (debt/leverage) and internal sources of funding. (Safitri and Wahyuati, 2015). Ratio of the leverage serves as an essential role in enhancing firm performance and productivity (Saraswathi et al., 2016). Leverage reflects a firm's ability to effectively manage fixed cost assets to generate profits for the firm's owners (Moeljadi et al., 2015). Leverage is crucial in giving a firm's value to the maximum level (Welley and Untu, 2015). Adding debt to a firm can function as a tool to control cash flows freely by management. Increased fund control will upgrade the firm's output and execution, thus impacting the strengthening of the firm's value as shown based on the growth of stock prices (Mediawati, 2016). Research results from Putri and Ukhriyawari (2016) and Hermuningsih (2012) show that leverage has a positive and significant effect on firm value. On the other hand, research has the result from Sujoko and Soebiantoro (2007) and Wulandari (2013) indicate different outcomes, arguing that leverage leaves a negative and compelling aftermath on firm value. Firms involved in huge debts also have huge debt costs. This will burden the firm and the investor confidence in the firm will eventually decrease (Thaib and Dewantoro, 2017).

The firm size is also considered as a vital role in optimizing firm value. A firm's value is a signal of its fistcal robustness in sustaining its operational activities (Denziana and Monica, 2016). Large companies have several advantages, including ease of accessing the funding (Dewi and Wirajaya, 2013), tactics to reduce the incoming risk (Chen and Chen, 2011), and chances to obtain more profits and more suitable expectation within the firm (Soliha, 2002). The positive influence of firm size on access to funding sources (Pantow et al., 2015) can increase investor confidence in increasing firm value as reflected in stock prices. Larger companies are expected to get the funding sources easier for both operational costs and firm development. The expectation of firm growth will be trailed by more-willed investor determination in increasing the control of shares in the respective firm. Strong demand for the firm's shares will further impact on the increase in stock prices.

Profitability recognized as a ratio of leadership's proficiency derived based on sales or investments (Hermuningsih, 2012). Profitability that is high indicates a good expectation for the firm, indicating that investors will respond happily to this marker by rising stock prices and firm value (Sujoko and Soebiantoro, 2007). Return is the primary motive for investors in making investments. An increase in the firm's profit produced will increase the returns received by investors, so the firm must always strive to improve its profitability, maintaining its attractiveness to the market (Mahendra et al., 2012).

The value of a firm is also influenced by its debt levels. Still, observationa; confirmation from companies in Indonesia is split into two groups, regarding the role of leverage. The first one demonstrates that leverage can be a mediating variable of firm size and profitability in explaining changes in firm value. Some researchers who have found these results include Hermuningsih (2012), Mulyani et al. (2017), Thaib and Dewantoro (2017). The last one states that leverage is not a variable of mediating the firm size and profitability, including Wulandari (2013), Rubiyani (2016), Andanika and Ismawati (2017).

Leverage (debt ratio) is able to be a vital role in mediating the effects of profitability and firm size on firm value because leverage or the firm's debt ratio reflects the extent to which the firm uses borrowed funds to finance its operational activities. It can act as a mediator in the influence of profitability and firm size on firm value. Leverage can affect the relationship between profitability and firm value. High leverage can increase the influence of profitability on firm value, as companies can utilize borrowed funds to increase profits and firm value (Ayub et al., 2018).

Based on the background and the researcher's high enthusiasm for the phenomena occurring above, research related to the firm value of the industrial sector becomes very interesting and the researcher wants to investigate the role of leverage as a mediator between profitability and firm size on firm value in industrial sector companies listed on the Indonesia Stock Exchange (IDX) from 2018 – 2022.

LITERATURE REVIEW

Profitability and Leverage

Profitability is a reflection of a firm's ability to generate profits. According to the pecking order theory, the sequence of a firm's use of funds is through internal financing, so when a firm's earnings increase, it has sufficient funds to finance operational costs. This is supported by the findings of Handoo and Sharma (2014), Guner (2016), Hermuningsih (2014a), and Wirjawan (2015). Additionally, companies adjust their target dividend payments according to investment opportunities. External funds will be used when truly needed through debt, and the last option is through the issuance of new equity. The use of debt can bring benefits, costs, and risks. Optimal debt usage, considering the firm's characteristics (assets, market share, and profit-making ability), can reduce the risk of failure in meeting obligations, preventing the firm from the risk of declining investor confidence, which can cause a decrease in firm value. In their operations, companies use debt as additional capital to increase their income and profitability.

The study by Kurniasih Dwi Astuti, Wulan Retnowati, et al. (2015) found that leverage (DAR) has a positive and significant impact on profitability (ROE). Based on the previous discussions and research findings, here is the proposed hyphothesis:

H1: Profitability has a significant effect on leverage.

Firm Size and Leverage

The size of a firm indicates its magnitude, and sales are one of the indicators used to determine its size. Firms with high sales can be categorized as large firms. Large companies generally have high sales and generate significant profits. The larger a firm is, the more funds it requires to cover operational expenses. Large firms typically have sufficient internal funds to meet their needs that will reduce their reliance on external funding. The larger the firm size, the lower its capital structure will be. Additionally, it can be concluded that leverage is a crucial element in the capital structure that can influence a firm's size and value. By deeply understanding the implications of leverage, a firm can develop an optimal capital structure strategy to achieve its business goals.

The study held by Guner (2016), Yoshendy et al. (2016), Handoo, Sharma (2014), and Wirjawan (2015) found that firm size has a negative impact on leverage. Similarly, Salim & Susilowati (2019) and Oktavina et al. (2018) reported that firm size has a negative impact on capital structure. However, Cevheroglu (2018), Li and Islam (2019), and Yousef (2019) found that firm size has a positive impact on capital structure. Based on the previous discussions and research findings, here is the proposed hyphothesis:

H2: Firm size has a significant effect on leverage.

Profitability and Firm Value

Profitability's effect on firm value is described using the theory of signaling. High profitability will create a positive signal for investors and will be a crucial role in enduring the firm's everlasting sustainability to ensure future prospects (Funawati and Kurnia, 2017). An increase in profitability indicates an increase in the firm's ability to generate profits for its shareholders. Large profits show the firm's capability to reimburse compensations, thereby increasing firm value.

Profitability can be considered as the main attraction for the owners (shareholders) because it is the result obtained through efforts made by management on the funds invested by shareholders and also reflects dividends according to the shares they own, which is the money they are about to reinvest and the money they are willing to pay in the form of cash or stock revenue to them (Jusriani and Rahardjo, 2013).

Research conducted by Yulita Setiawanta, St. Dwiarso Utomo, Imang Dapit Pamungkas, Jumanto, Luluk Muhimatul Ifada (2021) shows that profitability has a significant positive effect on firm value. Research by Annisaa Mahirah, Lia Uzliawati, et al. (2024) shows that profitability (ROA) has a significant positive influence in predicting firm value (PBV). Research by Tri Lestari and Windu Mulyasari (2019) analyzed that profitability and foreign ownership significantly influence firm value. Furthermore, research by Akhmadi and Yeni Januarsi (2021) shows that profitability is a positive factor that increases firm value. Based on the description and results of previous studies above, the following hypothesis is proposed:

H3: Profitability has a significant effect on firm value.

Firm Size and Firm Value

Firm size reflects high commitment of a firm to continuously improving its utility, so the market will be interested in paying more to obtain its shares because the market suggests that it will get a profitable return from the firm. In addition, firm size can also provide confidence to investors and creditors, which can increase firm value. Firm size is one of the factors affecting firm value. Firm size can be measured by various methods, such as total assets, number of employees, annual revenue, and market capitalization. Larger companies can gain more customers, offering a more competitive prices, and have better access to international markets. All of these can increase firm value.

According to revealed study by Khairina Natsir and Yusbardini (2020), firm size holds a compelling effect on firm value. Furthermore, research by Robert Lambey, Bernard Tewal, Jullie J. Sondakh and Maryam Manganta (2021) shows that firm size significantly and positively affects firm value. Research by Lia Uzliawati, Nurhayati Soleha, et al. (2023) shows that firm size gives a powerfully positive outcome on firm value. Viewed from the description and results of previous studies above, the following is proposed hypothesis:

H4: Firm size has a significant effect on firm value.

Leverage and Firm Value

When a firm has a soaring leverage level, it will also raise risks for investors, and investors' view of the firm will be negative. Thereby, the firm value decreases. This is because of the use of debt with interest expenses burdens to the firm, resulting in a high investment risk. If the firm is unable to meet debt payments on time, it indicates that payments to external parties are also hampered. The decline in the firm's valuation is caused by the use of high amounts of debt. Moreover, higher debt usage will decrease the firm value. An increase in debt will have the chance to increase the risk of the firm's income stream, where income is caused by external problems, while debt results in established expenses despite the income. An escalating debt burden makes the firm unable to pay its obligations in the form of interest and principal. The chance

of bankruptcy will go high due to the interest charged will be greater, eclipsing the favorable implications stemming from taxation relief.

According to research by Agus Gurnita Adi Kanta, Hermanto and Ni Ketut Surasni (2021), leverage produces a negative reaction on firm value. Research by Sergius Fribontius Bon and Sri Hartoko (2022) shows that leverage has a positive effect on firm value. Research by Paulus, Agrianti Komalasari and Reni Octavia (2022) shows that during the pandemic, leverage had a positive effect on firm value. Furthermore, research by Dirvi Surya Abbas, Tubagus Ismail, et al. (2022) shows that there is a compelling reaction of leverage on firm value. Based on the description and results of previous studies above, the following hypothesis is proposed:

H5: Leverage has a significant effect on firm value.

Profitability, Firm Value, and Leverage

Profitability is a measurement of the ability of a firm to develop profits from its operations. Profitability can be measured through the ratio of net income to sales, the ratio of net income to assets, or the metric representing the return on stockholders' investment. The higher the profitability level, the more efficient the firm is in generating profits. In managing these profits effectively, funding decisions or leverage are necessary. If a firm's profitability is good, it will affect the perception of external parties such as creditors, suppliers, and investors regarding the firm's condition in marketing and corporate investment activities. Subsequently, the firm value also increases. Furthermore, a high level of profitability indicates a high rate of return on investment, making the firm has sufficient internal funds to finance any expenditures required by the firm, thereby automatically reducing the portion of debt usage.

Leverage can be the mediation of the link-up of profitability and firm value. In this context, leverage functions as an intervening variable that links profitability with firm value. By using leverage, companies can increase their profitability, which in turn can increase firm value. However, if leverage is too high, the risk of bankruptcy may increase, which can reduce firm value. In a study conducted by Chen LJ, Chen SY (2015), they found that leverage mediates the relationship between profitability and firm value. The outcomes of this research indicate that the positive influence of profitability on firm value can be explained through the use of leverage. Based on the description and results of previous studies above, the following hypothesis is proposed:

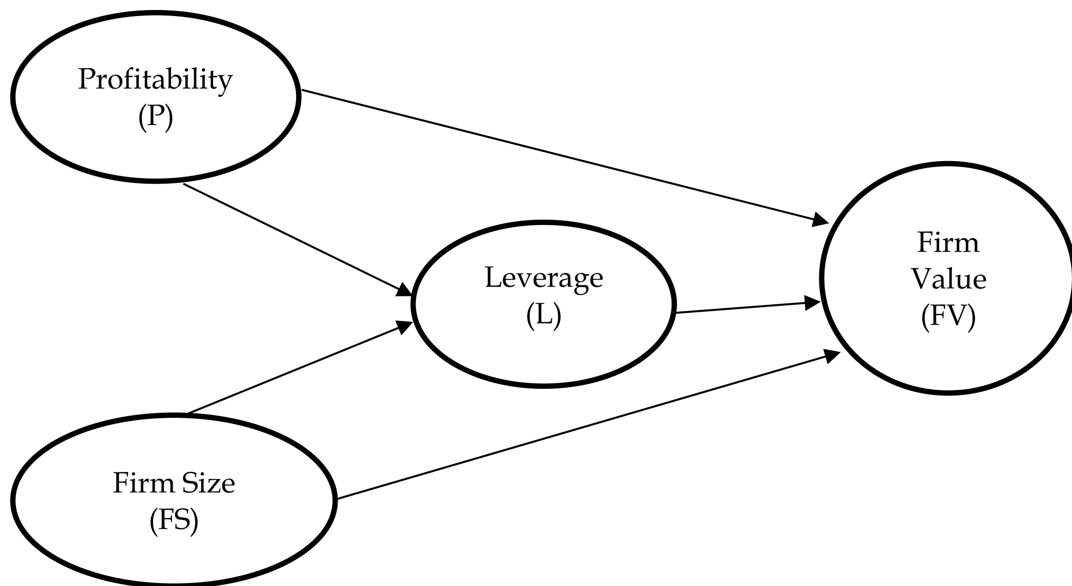
H6: Leverage mediates the significant influence of profitability on firm value.

Firm Size, Firm Value, and Leverage

Firm size can be measured in various ways, such as total assets, market capitalization, or number of employees. Firm value, on the other hand, reflects the level of a firm's success in creating value for shareholders and other stakeholders. Leverage, or a firm's debt ratio, is a factor that can influence the relationship between firm size and firm value. Larger firms tend to have more resources, broader market access, and the ability to face greater risks. This can increase firm value due to larger investments, faster growth, and higher profits. However, the link-up between firm size and firm value can be influenced by leverage.

Leverage can affect firm value through two mechanisms. First, leverage can increase a firm's financial risk, which can reduce firm value. Second, leverage can increase a firm's potential profits through the use of borrowed funds for profitable investments. If leverage is used wisely, it can increase firm value. According to research conducted by Chen et al. (2010), they found that the relationship between firm size and firm value is positively influenced by leverage. They found that larger firms with higher leverage have higher firm values. These results indicate that leverage acts as a mediator between firm size and firm value. Based on the description and results of previous studies above, the following hypothesis is proposed:

H7: Leverage mediates the significant effect of firm size on firm value.



Picture 1. Conceptual Framework

METHODOLOGY

The research methods employed are descriptive and verification methods with an approach of quantitative. Descriptive research method involves data collection that is used to test hypotheses or to clear-up questions related to the latest status of the research subject, which is a factual research method about the status of a group of people, an object, a situation, a system of thought or an event at the present time with the correct interpretation. Meanwhile, the verification research method is used to test hypotheses using statistical calculations.

The chosen population in this research derives from industrial sector firms listed on the IDX (Indonesia Stock Exchange) in 2018 – 2022, conducting 63 companies. The chosen fragment is a part of the number and characteristics possessed by the population. In this study, the author uses a non-probability sampling technique with a purposive random sampling approach. The sample in this study consists of 38 industrial sector companies listed on the IDX from 2018 – 2022.

The type of data found in this research is secondary data formed from annual reports of industrial sector companies available in IDX in 2018-2022, which have been published on the official website of the IDX, www.idx.co.id, as well as the official websites of each industrial sector firmthat is part of the population and sample in this research.

In this research, the indicator purposefully aimed to measure firm value is the Price Earnings Ratio (PER). Profitability is calculated by Return On Assets (ROA). Firm size can be measured in several ways, such as by looking at the firm's total sales, total equity, and total assets. The mediating variable, Leverage, is measured as a percentage of total debt to total assets in one period, called the Debt to Asset Ratio (DAR).

Statistical analysis is necessary to test research hypotheses and drawing conclusions about regarding their acceptance or rejection to the existing research hypotheses. The research analysis uses the Statistical Package for the Social Sciences (SPSS) version 25 for Windows statistical analysis software, specifically utilizing Multiple Linear Regression Analysis.

RESEARCH RESULTS

Normality Test

This test has the function to examine whether in the regression model, the confounding variable or residual has a normal distribution (Ghozali, 2018). A good regression model has a normal or near-normal residual distribution. One way to detect whether the residuals are normally distributed or not is by using a statistical test (Kolmogorov-Smirnov Test). Data is interpreted as normally distributed if the significance value is greater than 0.05 (Sig. > 0.05). The results show that the significance value from the Kolmogorov-Smirnov normality test is 0.173, which means Sig. 0.173 is greater than 0.05 (Sig. 0.173 > 0.05). Therefore, it shows that the normality test for equation 2 in the classic assumption has normally distributed data.

Multicollinearity Test

This test used to examine the possibility in the correlation between independent variables in the regression model. This aspect is determined by checking the tolerance value and the variance inflation factor (VIF) values. When the tolerance value < 0.10 and VIF > 10, multicollinearity will occur. If the tolerance value > 0.10 and VIF < 10, it can be said that there is no multicollinearity among the independent variables. The results of the multicollinearity test obtained a tolerance value from profitability (ROA), firm size (TA), and leverage (DAR) > 0.10 (0.57, 0.835, and 0.50 > 0.10), and VIF values for profitability (ROA), firm size (TA), and leverage (DAR) < 10 (1.754, 1.197, and 2.001 < 10). Therefore, it can be said that the regression model in this study does not exhibit multicollinearity, and the regression model is suitable for use.

Heteroscedasticity Test

This test executed to examine whether there is a variance from the residuals of one observation to another in the regression model. The Glejser test was used to analyse the heteroscedasticity test. The Glejser test is done by regressing the independent variables with the absolute value of the residuals. If the significance value between the independent variables and the absolute residuals is greater than 0.05, then there is no heteroscedasticity problem (Ghozali, 2018). The results of this preferred test show that all independent variables, profitability, firm size, and leverage, statistically significantly influence their residual values. This can be seen from the sig. values showing the probability results for the profitability (ROA) variable of 0.052 > 0.05, the firm size (TA) variable of 0.954 > 0.05, and the leverage (DAR) variable of 0.520 > 0.05. Therefore, it can be concluded that there is no heteroscedasticity, and the regression model can be used.

Autocorrelation Test

This test is conducted to examine whether the linear regression model has a correlation in the disturbance error in period t with the disturbance error in period t-1 (previous) (Ghozali, 2018). In this study, the Durbin-Watson test was used to analyze the presence of autocorrelation. This test is utilized mainly for first-order autocorrelation and it requires the presence of an intercept (constant in the regression model and no variable among the independent variables). The decision on the presence or absence of autocorrelation is made based on whether the Durbin-Watson value falls between the values of du and 4-du, which

indicates that the model is not affected by the autocorrelation problem. According to the results, the Durbin-Watson value shows a figure of 1.777 with a du value of 1.7455 and a 4-du value of 2.2545. Meanwhile, the dl value shows a figure of 1.6336. The way to find the dl and du values in the Durbin-Watson table is by looking at the value of k, which is the number of independent variables used, and the number of samples used. Based on the above, it is known that the Durbin-Watson value is between the du and 4-du values (du < DW < 4-du), which is 1.7455 < 1.777 < 2.2545, indicating that there is no autocorrelation.

Analysis of Multiple Linear Regression

This aspect of analysis is used to test the influence of independent variables on the dependent variable.

Effect of Profitability (ROA) on Leverage (DAR)

This aspect shows that the t-value for profitability (ROA) is -8.554, which is greater than the t-table value of 1.98238 (-8.554 > 1.98238), with a significance level of 0.000. This indicates a significance level of less than 0.05 (0.000 < 0.05). From these results, H1 is accepted. Thus, profitability (ROA) has a significant effect on leverage (DAR).

Effect of Firm Size (TA) on Leverage (DAR)

The outcomes of this aspect show that the t-value for firm size (TA) is -3.996, which is greater than the t-table value of 1.98238 (-3.996 > 1.98238), with a significance level of 0.000. This indicates a significance level of less than 0.05 (0.000 < 0.05). From these results, H2 is accepted. Thus, firm size (TA) has a significant effect on leverage (DAR).

Effect of Profitability (ROA) on Firm Value (PER)

This sector shows that the t-value for profitability (ROA) is 2.091, which is greater than the t-table value of 1.98260 (2.091 > 1.98260), with a significance level of 0.039. This indicates a significance level of less than 0.05 (0.039 < 0.05). From these results, H3 is accepted. Thus, profitability (ROA) has a significant effect on firm value (PER).

Effect of Firm Size (TA) on Firm Value (PER)

This study shows the t-value for firm size (TA) is 0.519, which is smaller than the t-table value of 1.98260 (0.519 < 1.98260), with a significance level of 0.605. This indicates a significance level of greater than 0.05 (0.605 > 0.05). From these results, H4 is rejected. Thus, firm size (TA) has no significant effect on firm value (PER).

Effect of Leverage (DAR) on Firm Value (PER)

The outcomes of this aspect show that the t-value for leverage (DAR) is -2.410, which is greater than the t-table value of 1.98260 (-2.410 > 1.98260), with a significance level of 0.018. This indicates a significance level of less than 0.05 (0.018 < 0.05). From these results, H5 is accepted. Thus, leverage (DAR) has a significant effect on firm value (PER).

Effect of Profitability (ROA) on Firm Value (PER) through Leverage (DAR)

Deriving from the manual calculation results, the t-value is 2.30405815, and the Sobel test results through the Sobel Test Calculation for the Significance of Mediation application yield a value of 2.31867329 with a significance level of 0.02041276. These calculations use absolute values, ignoring negative signs due to the limitation of the Sobel test, which cannot handle negative values. This

value is greater than the t-table value of 1.98260. This shows that leverage (DAR) mediates the effect of profitability (ROA) on firm value (PER). The results state that H6, which posits that profitability (ROA) significantly influences firm value (PER) through leverage (DAR), is accepted. This occurs because the testing of Profitability (ROA) on leverage (DAR) found a significant effect. Since the significance level of the effect of Profitability (ROA) on leverage (DAR) is 0.02041276, which is less than 0.05, it is significant. Therefore, the condition for determining a mediating variable is met, and leverage (DAR) is a variable that can mediate the effect of profitability (ROA) on firm value (PER).

The calculation results in the study found that the direct effect is 13.506, while the indirect effect is 9.919, so the total effect of profitability (ROA) on firm value (PER) through leverage (DAR) is 23.425. Based on the calculation and testing results, it can be concluded that leverage (DAR) can mediate the effect of profitability (ROA) on firm value (PER).

Effect of Firm Size (TA) on Firm Value (PER) through Leverage (DAR)

By employing the manual calculation results, the t-value is 1.99867, and the Sobel test results through the Sobel Test Calculation for the Significance of Mediation application yield a value of 2.04611093 with a compelling level of 0.04074546. These calculations use absolute values, ignoring negative signs due to the limitation of the Sobel test, which cannot handle negative values. This value is greater than the t-table value of 1.98260. This shows that leverage (DAR) mediates the effect of firm size (TA) on firm value (PER). The results state that H7, which posits that firm size (TA) significantly influences firm value (PER) through leverage (DAR), is accepted. This occurs because the testing of firm size (TA) on leverage (DAR) found a significant effect. Since the significance level of the effect of firm size (TA) on leverage (DAR) is 0.04074546, which is less than 0.05, it is significant. Therefore, the condition for determining a mediating variable is met, and leverage (DAR) is a variable that can mediate the effect of firm size (TA) on firm value (PER).

The calculation results in the study found that the direct effect is 0.147, while the indirect effect is 0.245, so the total effect of firm size (TA) on firm value (PER) through leverage (DAR) is 0.392. Based on the calculation and testing results, it can be concluded that leverage (DAR) can mediate the effect of firm size (TA) on firm value (PER).

DISCUSSION

Profitability (ROA) gives a compelling effect on leverage (DAR). Profitability (ROA) and leverage (DAR) are two important concepts in a firm's financial analysis. Profitability defined as a firm's ability to generate profits from its assets, while leverage measures the extent to which a firm uses debt to fund its operations. Companies with low profitability may have difficulties paying off debt, so they must limit their use of leverage to avoid being overburdened by debt. On the other hand, highly profitable companies may choose to limit their use of leverage to reduce their financial risk. The results are in line with the one analysed from Helfiardi & Sri (2021), which states that profitability (ROA) affects leverage (DAR), meaning that firms with immense amount of profitability tend to have the ability to generate sufficient profits to pay off debt, allowing them to use leverage more safely. Additionally, some firms may choose to use leverage aggressively despite low profitability because they believe that the use of debt can increase their potential profits.

Firm size (TA) gives a compelling outcome on leverage (DAR). Additionally, A firm with a large total asset base tends to have the ability to borrow more money than a firm with a smaller total asset base. Firm size, often measured by total assets, can significantly influence the level of leverage or the debt-to-asset ratio (DAR). Firms with huge amount of assets may find it less difficult to bring in allowances at lower interest rates because they are considered to have more assets that can be used as collateral. Although firm size can influence leverage, this is not the case in all situations. Large companies may choose to minimize their use of debt to avoid excessive financial risk. On the other hand, smaller companies may take advantage of high leverage to expand their businesses. Research conducted especially came from Guner (2016), Yoshendy et al. (2016), Handoo, Sharma (2014), and Wirjawan (2015) proves that firm size gives a negative outcome on debt levels. Research analysed by Salim & Susilowati (2019) & Oktavina et al. (2018) states that firm size has a negative effect on capital structure. However, according to research by Cevheroglu (2018), Li and Islam (2019), and Yousef (2019), firm size leaves a positive impression on capital structure.

Profitability (ROA) affects firm value (PER) significantly. Firms with high ROA is believed to have a higher firm value. This can be explained by the fact that investors will be more keen in firms that are able to generate high profits from their assets. In this case, a high ROA can reflect the efficiency of a firm's asset utilization and its ability to consistently generate profits. The results of this study are in line with research conducted by Widyanti (2016), which showed that profitability has a significant effect on firm value, and research conducted by Iman, Choirul et al. (2021), which stated that profitability affects firm value. This means that the higher a firm's profitability, the more interested investors will be in investing in the firm's shares, with the expectation of earning returns, thereby increasing the firm's value.

Firm size (TA) does not affect firm value (PER) significantly. A large firm size (TA) does not naturally promise a high firm value, as large firms are believed to not be willing to create new investments based on the expansion until their

obligations (debt) have been settled. Meanwhile, when investing, investors do not only consider firm size (TA) but also take into account that other factors influencing their investment decisions, such as the firm's growth and profit increases. The outcomes of this research are in line with research conducted by Dewi and Wirajaya (2018), showing that firm size does not influence firm value.

Leverage (DAR) gives a magnificent effect on firm value (PER). The concept of leverage reflects the use of borrowed funds to increase potential returns for shareholders. However, the relationship between leverage and firm value (PER) cannot always be assured. The use of leverage can increase firm value (PER) due to the potential to increase earnings per share for shareholders. However, another view emphasizes that the use of debt also carries risks that can decrease firm value (PER), especially if the firm faces difficulties in paying interest or principal on its debt. The results of this study are in line with research conducted by Akhmad et al. (2020), which states that leverage affects firm value. This is because the higher a firm's debt, the lower its firm value, sending a negative signal to investors. Excessive use of debt will reduce the benefits received from using debt, and there are concerns about a decline in the firm's profits and a reduction in dividends received by investors.

Leverage (DAR) is a variable that can mediate the effect of profitability (ROA) on firm value (PER). The results indicates that this research is in line with research conducted by Idah Zuhroh (2019), which stated that leverage (DAR) is a variable to mediate the effect of liquidity, size, and profitability (ROA) on firm value (PER). Additionally, the results of this study are also in line with research conducted by Richo Prasetyo (2019) and Muhammad Sukarno et al. (2016), which stated that capital structure mediates the effect of profitability (ROA) on stock prices.

Leverage (DAR) can mediate the effect of firm size (TA) on firm value (PER). This research itself is in line with research conducted by Idah Zuhroh (2019), which stated that leverage (DAR) is a variable that mediates the effect of liquidity, firm size (TA), and profitability on firm value (PER). Firm size can influence firm value through various mechanisms, one of which is through the use of leverage. Large companies may have better access to capital markets and can take advantage of economies of scale to reduce debt costs. Thus, they can use leverage efficiently to increase firm value. However, it is worth noting that firm size may not always produce a positive impact on firm value through leverage. Large companies may tend to have a lower risk of bankruptcy, so they may not need to use leverage aggressively to increase firm value.

CONCLUSIONS AND RECOMMENDATIONS

From the research conducted above, the results, the author can draw the following conclusions:

1. Profitability (ROA) gives a compelling effect on leverage (DAR).
2. Firm size (TA) gives a compelling outcome on leverage (DAR).
3. Profitability (ROA) affects firm value (PER) significantly.
4. Firm size (TA) does not affect firm value (PER) significantly.
5. Leverage (DAR) gives a magnificent effect on firm value (PER).
6. Leverage (DAR) is a variable that can mediate the effect of profitability (ROA) on firm value (PER)
7. Leverage (DAR) can mediate the effect of firm size (TA) on firm value (PER).

FUTURE RESEARCH

Future research could use research objects from other sectors, such as Basic Materials, Financial Sector, Consumer Non-Cyclicals Sector, and Consumer Cyclicals, as these four sectors have more than one hundred firms listed in the BEIIC (Indonesia Stock Exchange Index Classification). This would allow for a larger sample size and more comprehensive observations. The results obtained from such research would provide more valuable insights for decision-making processes aimed at enhancing firm value.

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