

Capital Structure, Profitability, Hedging Policy, Firm Size, and Firm Value: Mediation and Moderation Analysis

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Abstract. The purpose of this research is to determine the impact of the capital structure on firm value through profitability moderated by hedging policies and firm size. Verification analysis is used in this study, with data analysis techniques through conditional process analysis. For the 2016-2020 period, the research population consists of a variety of industrial sector manufacturing companies listed on the Indonesia Stock Exchange. The results show that: capital structure has an impact on profitability; capital structure and profitability have an impact on firm value; profitability does not mediate the effect of capital structure on firm value, which is moderated by hedging policies and firm size; hedging policies and firm size moderate the direct effect of capital structure on firm value; and hedging policies and firm size do not moderate the indirect effect of profitability on firm value.

1. Introduction

The company's primary goal is to maximize its owner's welfare by increasing the company's value. This study investigates the role of profitability, as moderated by dividend policy and firm size, in mediating the effect of capital structure on firm value. This pandemic, according to the Organization for Economic Cooperation and Development (OECD), poses a risk of a major economic crisis marked by the cessation of production activities in many countries, a drop in public consumption, a loss of consumer confidence, and falling stock markets, all of which lead to uncertainty. If current trends continue, the OECD estimates that output levels in many countries will fall by a fifth to a quarter, with consumer spending falling by a third. This estimate certainly puts Indonesia's economy in jeopardy. According to Pakpahan (2020), the COVID-19 pandemic has three ramifications for Indonesia, notably the tourist, trade, and investment sectors.

In making investment decisions, apart from external macroeconomic factors, the company's internal factors are also considered as indicators of company performance, such as company value, capital structure, profitability, and so on. The company's value is critical because it reflects the company's performance, which can influence investors' perceptions of the company. [2]. The stock price-to-book value ratio is a popular metric for making investment decisions [3]. In other words, the company's book value is the value of its assets divided by the number of shares issued by the company.

In other words, the book value of the shares represents the fair value of the issuer's shares, whereas the share price is influenced by a variety of factors and sentiments [4]. The stock exchange price of shares always reflects the company's estimated future performance or book value [5]. Because, in essence, people who buy shares are purchasing the future in order to invest in it over time [6].

The companies chosen for this study will be chosen by comparing the value of the Industrial Price Book Value (PBV) ratio in each sector on the Indonesia Stock Exchange. The first step is to compute the Price Book Value (PBV) ratio data. Industries are divided into nine sectors that are listed on the Indonesia Stock Exchange. Price Book Value (PBV) is very important in the industry because it can influence investors' decisions to invest in companies of interest. The following is a historical table of Indonesia Stock Exchange company values by sector from 2016 to 2020, calculated using Price Book Value (PBV).

Table 1. Price Book Value (PBV) of Industry per Sector of Companies Listed on the Indonesia Stock Exchange in the period 2016 – 2020 (in units of times)

No.	Industry Classification	2016	2017	2018	2019	2020	Rata-rata PBV
A		Main Sector					
1	Agriculture Sector	3,64	3,02	1,96	1,19	1,31	2,22
2	Mining Sector	1,57	1,67	3,24	2,26	2,01	2,15
B		Manufacturing Sector					
1	Basic and Chemical Industry Sector	1,51	5,83	1,87	1,54	1,63	2,48
2	Multi-Industrial Sector	1,23	1,24	1,3	2,8	1,62	1,64
3	Consumer Goods Industry Sector	5,4	5,58	5,65	4,17	3,83	4,93
C		Service Sector					
1	Property, Real Estate and Building Construction Sector	1,63	1,78	2,19	2,22	1,58	1,880
2	Infrastructure, Utilities and Transportation Sector	-0,86	4,17	1,82	2,34	1,91	1,876
3	Financial Sector	1,84	1,97	2,27	2,42	2,45	2,19
4	Trade, Services and Investment Sector	1,88	6,43	2,72	2,56	2,12	3,14

Source: idx.co.id (processed)

Table 1 shows the average variation of changes that occur every year in the Price Book Value (PBV) of each industry sector. Changes from 2016 to 2020 fluctuated with different average price book value (PBV) in each sector. The highest average price book value (PBV) is in the consumer goods industry sector, with an average price book value (PBV) of 4.93 times, while the lowest average price book value (PBV) is in the various industries, which is 1.64 times and fluctuates, tending to decrease. Even though manufacturing companies in the various industrial sectors have a low average price book value (PBV) and have experienced decreased fluctuations, the interest in investing in this sector is still quite attractive. This can be seen in the strengthening of the JCI in May and December 2020, as well as in May 2021 with The highest increases occurred in the various industrial sectors.

The factors that are thought to affect firm value are profitability [7], [8]. Profitability is the right variable to measure the level of management effectiveness in a company [9], which is indicated by the profit generated from sales and investment income. The profitability ratio in this study is proxied by return on equity (ROE) because it shows how the company's performance is seen from the use of the company's overall capital in generating profits [10].

The other factor that is thought to affect the profitability and value of the company is its capital structure [11]. A high capital structure value will have a negative influence or impact on the company's finances. Companies that are not able to manage funds effectively and efficiently will see their profits reduced because the greater the value of debt, meaning that the amount of own capital cannot meet all of the company's fixed obligations, the smaller the profit generated.

Capital structure analysis is important because it enables one to evaluate long-term risks and prospects for the level of income earned, the capital structure has a direct impact on the company's financial position, which will affect the company's performance [12]. The relationship between capital structure and firm value has been explained in capital structure theories. Using a set of assumptions, the Modigliani and Merton Miller (MM) theory, proves that how a company finances its operations (capital structure) has no relationship with firm value [13]. The different effects are explained in the trade-off theory, which explains that if the position of the capital structure is below the value of the optimal capital structure, then the value of the company can increase with every increase in debt. If the value of the capital structure has reached the target, then any increase in debt can reduce the value of the company [14].

International economic relations between countries are needed in the industrial era 4.0 and society 5.0. This relationship is characterized by the exchange of products and production facilities, as well as accounts payable and other relationships. International trade provides opportunities and challenges for companies to be able to compete and improve their performance so that company goals can be achieved. Export growth by business sector from January 2020 to December 2021 Every year, export growth is dominated by the manufacturing sector. The average contribution from the manufacturing sector is 78.72%, the mining sector is 14.24%, the agricultural sector is 2.18%, and the oil and gas sector is 5.18%. In 2021, it can be seen that manufacturing companies experienced a decline in exports by 3.84%. This indicates that fluctuations in foreign exchange rates affect the export level of manufacturing companies (www.bi.go.id).

The international economy has resulted in domestic and multinational companies conducting transactions in foreign currencies, both exports and imports, and activities in the international credit market may face the risk of exchange rate fluctuations. Exchange rate fluctuations can be in the position of the rupiah appreciating or depreciating against the dollar, which is caused by the dollar phenomenon. This phenomenon needs to be managed to minimize adverse risks or vice versa to be able to take advantage of opportunities due to the difference in currency values. Based on this, a hedging policy is very necessary to mitigate the risks posed by international trade, namely foreign exchange prices [15], [16]. The researcher tries to determine the moderating role of this hedging policy on the effect of capital structure through profitability on firm value.

Furthermore, the role of another moderating variable is firm size. Increasing the size of the company can strengthen the size of the direct (capital structure on firm value) or indirect (capital structure through hedging policy on firm value) effect. The larger the firm size, the stronger the influence. Every company must have a desire to always report positive profit growth, as it is hoped that this will be able to attract investors to invest their capital. Companies that have a larger size are considered to have a lower level of negative risk because they are considered to have greater access or reach to the capital market with the aim of obtaining funds and increasing company value [17].

The role of profitability in mediating the effect of capital structure on firm value has been extensively studied [18]–[23], but this study will broaden the scope of research by including the moderating variables of hedging policy and firm size, so that a new research model with a moderated mediating effect will be developed later on. Based on this, the data analysis method will be based on one of the models [24] which is commonly called conditional process analysis.

2. Literature Review and Hypothesis Development

2.1. Capital Structure

The ratio of the value of debt to the value of a company's own capital as represented in the financial records at the end of the year is known as capital structure. The Debt to Equity Ratio can be used to evaluate a company's capital structure (DER). A financial structure that demonstrates the comparative composition of the company's sources of funds in financing its operations. The decision to choose a source of funds is critical for every company because it affects the company's financial structure, which in turn affects profitability. The trade-off approach is unable to account for the inverse relationship between profitability and debt ratio. According to Myers (1977), the trade-off approach implies that increasing DER value (increasing the amount of debt) can boost profitability, but only if the debt is used properly. According to studies Rinofah et al (2021) and Sriwananda et al (2021), capital structure has a positive effect on profitability.

The trade-off theory explains that the more debt the company uses, the higher the company's stock price will be at the optimal target capital structure. This means that if the capital structure is below the optimal target value, the value of the company will increase every time there is an increase in debt. The assumption of the MM theory with taxes explains that the higher the debt used by the company, the more its stock price can reach its maximum value. According to [27], the theory of capital structure explains the company's funding policy in determining the capital structure that aims to optimize the value of the company. Research conducted by [28], and [29] examined the effect of capital structure on firm value and obtained results showing a significant influence in a positive direction between capital structure and firm value.

2.2. Profitability

Profitability as proxied by return on equity (ROE) is one of the factors that affect firm value. High profitability will result in high net earnings per share as well as a high value for the company [30]. In general, investors will look for companies with a high level of profitability because it indicates the company has a high return [31]. Therefore, companies that are able to generate high profits will increase the confidence of investors to invest their capital in the company. High profitability can increase the company's stock price. Signaling Theory [32], which suggests that high profitability indicates good company prospects so that investors will respond positively and company value will increase.

According to the trade-off theory, if the DER rises, the firm's worth rises as well, as long as the DER has not yet reached its optimum position. Increased DER value (debt amount) can boost profitability, according to trade-off theory, but only if the debt is increased and used wisely. Research by Rahman (2014), Hamidy et al (2015) states that profitability is able to mediate the effect of the capital structure on firm value. Try to add a moderating variable of hedging policy and firm size to this study. International trade transactions usually use foreign currency.

These transactions cause debt or profits, but fluctuations in the value of foreign exchange can change at any time, so hedging policies are needed to mitigate these risks. The size of the company will also have an impact on both small and large companies in international trade. Large companies can usually get funding sources and be trusted by other companies, so that they can increase profits and have an impact on company value.

2.3. Hedging Policy and Firm Size

The company's hedging policies is an action that aims to increase the company's worth. Investors will place a higher value on companies that engage in hedging efforts in this circumstance (Suriawinata, 2004). To limit the risk of loss due to variations in foreign currency exchange rates, the company must implement a hedging policy approach to decrease exposure and other risks that may affect currency values in financing activities, which will in turn damage the company's value. The larger capital structure, which is matched with hedging measures, is projected to reduce risk and boost profitability, resulting in increased firm value [34].

One of the factors that investors consider is the company's size. In terms of fund management, larger companies typically have better management. Large corporations typically have long-term financial plans and strategies for implementing those plans. The larger the company, the more likely investors will place their trust in it. The company is considered capable of regulating and controlling the company's capital structure. In other words, the size of a company as measured by total assets will determine the ease with which it will be able to get funds to develop the company's business with large amounts of debt. In other words, the size of a company affects the company's capital structure [35].

Companies with large sizes tend to attract investors to invest in these companies so that they can increase the value of the company itself, this is because companies with large sizes have great confidence in obtaining sources of funds, making it easier to get credit or loans from outside parties [36], and can also mitigate risks arising from foreign exchange transactions.

Based on the relationship between the variables that have been described previously, the conceptual framework of the research can be drawn as follows:

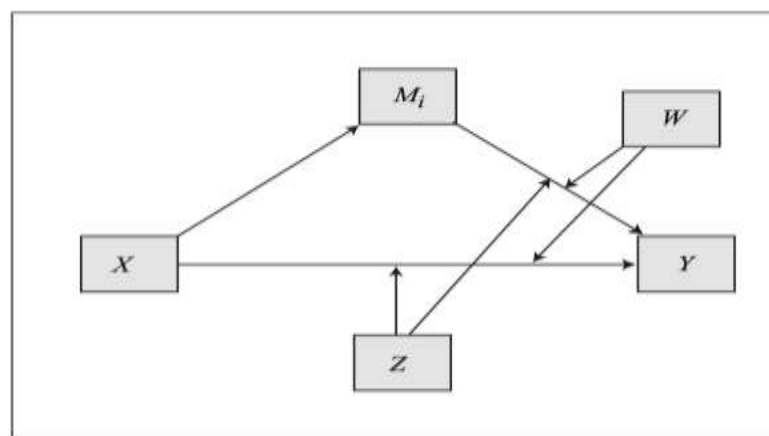


Figure 1. Conceptual Framework

X represents the capital structure; M stands for profitability.; W stands for Hedging Policy.; Z stands for the company's size.; Y stands for Firm Value.

Based on the conceptual framework above, the hypotheses of this research are:

- H1: Capital structure affects profitability
- H2: Capital structure affects firm value

H3: Profitability affects firm value.

H4: Profitability mediates the effect of capital structure on firm value, which is moderated by hedging policies and firm size.

H5: Hedging policies moderate the direct effect of the capital structure on firm value.

H6: Firm size moderates the direct effect of the capital structure on firm value.

H7: Hedging policies moderate the indirect effect of profitability on firm value.

H8: Firm size moderates the indirect effect of profitability on firm value

3. Research Methodology

This study's population consists of 56 industrial sector manufacturing companies listed on the Indonesia Stock Exchange from 2016 to 2020 (www.idx.co.id). The sampling technique is based on a non-probability sampling method with a purposive sampling approach, with 39 companies included in the sample.

Table 2. Research Sample

No.	Company Name
1	Argo Pantes Tbk.
2	Asia Pacific Fibers Tbk.
3	Asia Pacific Investama Tbk.
4	Astra International Tbk.
5	Astra Otoparts Tbk.
6	Ateliers Mecaniques D'Indonesie Tbk.
7	Century Textile Industry (PS) Tbk.
8	Eratex Djaja Tbk.
9	Ever Shine Textile Industry Tbk.
10	Gajah Tunggal Tbk.
11	Garuda Metalindo Tbk.
12	Goodyear Indonesia Tbk.
13	Grand Kartech Tbk.
14	Indo Kordsa Tbk.
15	Indo-Rama Synthetics Tbk.
16	Indomobil Sukses Internasional Tbk.
17	Indospring Tbk.
18	Jembo Cable Company Tbk.
19	Kabelindo Murni Tbk.
20	KMI Wire and Cable Tbk.
21	Multistrada Arah Sarana Tbk.
22	Nipress Tbk.
23	Nusantara Inti Corpora Tbk.
24	Pan Brothers Tbk.
25	Panasia Indo Resources Tbk.
26	Prima Alloy Steel Universal Tbk.
27	Primarindo Asia Infrastructure Tbk.
28	Ricky Putra Globalindo Tbk.
29	Sat Nusapersada Tbk.
30	Selamat Sempurna Tbk.
31	Sepatu Bata Tbk.
32	Sri Rejeki Isman Tbk.
33	Star Petrochem Tbk.
34	Sumi Indo Kabel Tbk.
35	Sunson Textile Manufacturer Tbk.

No.	Company Name
36	Supreme Cable Manufacturing & Commerce Tbk.
37	Tifico Fiber Indonesia Tbk.
38	Trisula International Tbk.
39	Voksel Electric Tbk.

Source: idx.co.id (processed)

Variable explanations, variable concepts, indicators, sizes, and scales are described in the variable operationalization table as follows:

Table 3. Variable Operations

Variable	Indicator		Reference
Capital Structure (X)	<i>Debt to Equity Ratio (DER)</i>	$\frac{\text{Total Debt}}{\text{Total Equity}}$	[37], [38]
Profitability (M)	<i>Return on Equity (ROE)</i>	$\frac{\text{Profit After Tax}}{\text{Total Equity}}$	[39]
Hedging Policies (W)	<i>Dummy Variabel</i>	0 = No Doing Hedging 1 = Doing Hedging	[40], [41]
Firm size (Z)	<i>Total Asset</i>	<i>Ln Total Asset</i>	[42]
Firm Value (Y)	<i>Price to Book Value (PBV)</i>	$\frac{\text{Market Price Per Share}}{\text{Book Value Per Share}}$	(Chabachib et al., 2019; Saputri & Giovanni, 2021)

Furthermore, to determine the relationship between two or more variables, we used verification analysis. This method is used to test the truth of a hypothesis. The data analysis technique used in this study is conditional process analysis with the help of SPSS plus PROCESS macros. This technique can be used when research is aimed at understanding and describing the conditional nature of a mechanism where one variable transmits its influence on another variable and testing the hypothesis about the contingency of an influence [24]. The Hayes models that will be used are models 4 and 17 in accordance with the proposed conceptual framework.

4. Discussion and Results

4.1. Model and Hypothesis Testing

The r-square (reliability indicator) for the dependent construct and the t-statistical value of the path coefficient test can be used to evaluate model testing. The higher the value of r-square, the better the proposed research model's prediction model. In hypothesis testing, the path coefficient value indicates the level of significance. R² values of 0.75, 0.50, and 0.25 indicate that the model is strong, moderate, and weak, respectively (Ghozali and Latan, 2014:78).

The higher the R^2 value, the better the proposed research model's prediction model. In addition, hypothesis testing will be performed based on the proposed hypothesis.

4.1.1. Variant Analysis (R^2)

Analysis of Variant (R^2) or Determination Test, namely to determine the effect of exogenous variables on endogenous variables, the value of the coefficient of determination can be shown in table 4 as follows:

Table 4. Coefficient of Determination

	R Square	Information
Profitability	0,1701	Weak Model
<i>Before Moderation</i>		
Firm Value	0,1382	Weak Model
<i>There is moderation.</i>		
Firm Value	0,5033	Moderate Model

Source: Data processed, 2022

Based on the r-square value in table 4, it shows that the capital structure is able to explain the variability of the profitability construct by 17.01%, and the remaining 82.99% is explained by other constructs outside the study. Meanwhile, capital structure and profitability are able to explain the variability of the firm value construct by 13.83% before the moderating variables of hedging policy and firm size are included in the model. After the inclusion of the moderating variable, the r-square value increased to 50.33%; the remaining 49.67 was another construct outside the study.

4.2. Hypothesis Testing

To test hypotheses 1, 2, and 3, the researcher used the PROCESS Macro Model 4 (Hayes, 2018), which uses the Bootstrap Method (Resample = 5000) to test it. Here are the results of the test:

Table 5. Hypothesis Testing 1, 2, and 3

Variable	Outcome Variable: Profitability				Bootstrap 95% CI	
	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>	LLCI	ULCI
Constant	0,353	0,235	1,4990	0,1355	-0,0111	0,0817
Capital Structure	-0,0123	0,0020	-6,2900	< 0,001	0,6892	0,8287
$R^2 = 0,1701$; $F = 39,5641$; $p < 0,001$						
Variable	Outcome Variabel: Nilai perusahaan				Bootstrap 95% CI	
	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>	LLCI	ULCI
Constant	1,5489	0,2777	5,5785	< 0,001	1,0013	2,0966
Capital Structure	0,0639	0,0253	2,5303	< 0,05	0,0141	0,1137
Profitability	-2,9163	0,8433	-3,4543	< 0,001	-4,5815	-1,2511
$R^2 = 0,1382$; $F = 15,3906$; $p < 0,001$						

Source: Data processed, 2022

The first hypothesis estimates that capital structure has an effect on profitability based on the results shown in table 5. There is an effect of capital structure on profitability ($b = -0.0123$; $SE = 0.0020$; $p < 0.001$), thus H1 is accepted. Financial management's expenditures will form a financial structure that will show the comparative composition of the company's sources of funds in financing the company's operations. The decision on the source of funds is critical for every company because it affects the company's financial structure, which in turn affects profitability. As measured by debt to equity, the company's source of funds is reflected by foreign capital as a source of spending on its assets.

If the DER is higher, the company's ability to achieve profitability is reduced, implying that the DER has a negative relationship with profitability [45]–[48].

Furthermore, the second hypothesis estimates that the capital structure has an effect on firm value based on the results shown in table 5. There is an effect of the capital structure on firm value ($b = 0.0639$; $SE = 0.0253$; $p < 0.05$), thus H2 is accepted. There are numerous advantages to using debt in the capital structure. According to the trade-off theory, using debt causes more of the company's operating profit to be accepted by the investor market. As a result, the greater the use of debt by a company, the greater its value and share price. According to the trade-off theory, if the capital structure's position is below the optimal point, any additional debt will increase the company's value. On the other hand, if the capital structure's position is above the optimal point, any additional debt will reduce the company's value. Assuming that the optimal capital structure target has not been met, the trade-off theory predicts a positive relationship between firm value and capital structure [29]. [49] research states that the capital structure has a positive effect on firm value.

The third hypothesis estimates that profitability has an effect on firm value. Based on the results shown in table 5, there is an effect of profitability on firm value ($b = -2.9163$; $SE = 0.8433$; $p < 0.001$), thus H3 is accepted. Management's performance in managing the available capital has not been maximized, causing net profit to be smaller than equity. It can be seen from the results of the descriptive analysis that this profitability freefall peaked in 2021, posting negative profitability compared to the company value, which tends to be stable. This result occurs because an increase in the company's profitability will make the company's profit per share increase, but with an increase in profitability, the company's share price does not necessarily increase. So, if earnings per share increase but are not accompanied by an increase in share prices, it will have an impact on decreasing the value of the company [50]. Next, to test hypotheses 4, 5, 6, 7 and 8 (moderated mediation model), we used PROCESS macro model 17 [24], which uses the bootstrap method (resample = 5,000) to test it. The following table 7 shows the test results:

Table 6. Hypothesis Testing 4, 5, 6, 7 and 8

Moderated mediation effects

Variabel	Outcome Variabel: Firm Value					Bootstrap 95% CI	
	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>	LLCI	ULCI	
	Constant	1,1044	0,2559	4,3163	< 0,001	0,5996	1,6091
Capital Structure	0,7816	0,1261	6,1978	< 0,001	0,5328	1,0304	
Profitability	3,4675	2,72986	2,4998	0,0133	0,731	6,204	
Hedging Policy	0,7453	0,6073	1,2273	0,2213	-0,4527	1,9433	
Capital Structure x Hedging Policy	-1,1776	0,1266	-9,3026	< 0,001	-1,4274	-0,9279	
Profitability x Hedging Policy	0,8826	2,6681	0,3308	0,7412	-4,381	6,1463	
Firm size	-0,1582	0,1728	-0,9157	0,361	-0,4991	0,1826	
Capital Structure x Firm size	-0,3906	0,0789	-4,9515	< 0,001	-0,462	-0,235	
Profitability x Firm size	0,9142	0,9158	0,9983	0,3194	-0,8924	2,7208	
$R^2 = 0,5033$; $F = 23,5636$; $p < 0,001$							
Conditional Direct Effect : Hedging Policy and Firm size (X on Y)							
Mediator	Hedging Policy	Firm size	Effect	SE	Bootstrap 95% CI		
Profitability	0	-1,4668	1,3545	0,1356	1,0870	1,6219	
	0	0	0,7816	0,1261	0,5328	1,0304	
	0	1,4668	0,2087	0,2005	-0,1869	0,6042	
	1	-1,4668	0,1769	0,0333	0,1112	0,2425	
	1	0	-0,3961	0,0933	-0,5801	-0,212	
	1	1,4668	-0,969	0,2075	-1,3784	-0,5595	

Conditional Indirect Effect : Hedging Policy and Firm size (X – M – Y)

Mediator	Hedging Policy	Firm size	Effect	SE	Bootstrap 95% CI	
					LLCI	ULCI
Profitability	0	-1,4668	-0,0262	0,1293	-0,3342	0,1633
	0	0	-0,0428	0,0933	-0,3472	0,0129
	0	1,4668	-0,0593	0,126	-0,4532	0,0093
	1	-1,4668	-0,0371	0,1972	-0,1136	0,6166
	1	0	-0,0537	0,1589	-0,1524	0,494
	1	1,4668	-0,0702	0,1571	-0,2416	0,4309
Indices of partial moderated mediation						
Moderators	Index		SE	Bootstrap 95% CI		
				LLCI	ULCI	
Hedging Policy	-0,0109		0,2162	-0,1095	0,7318	
Firm size	-0,0113		0,0551	-0,152	0,0491	

Source: Data processed, 2022

The fourth hypothesis predicts that profitability mediates the effect of capital structure on firm value, which is moderated by hedging policies and firm size. Further mediation analysis based on the bootstrap method shows that profitability does not mediate the effect of capital structure on firm value as moderated by hedging policies and firm size as presented in table 6. A 95% bootstrap confidence interval is generated for the indirect effect of capital structure on firm value through profitability. H4 is rejected because the Bootstrap Confidence Hedging Policy Interval is [-0.1095 to 0.7318] and the Bootstrap Confidence Interval Firm Size is [-0.152 to 0.0491].

The results of the study state that debt that can increase the company's profitability will not be able to give the firm more influence because profitability is not able to mediate the effect of capital structure on firm value. This research is in line with that conducted by [21], [51], thus manufacturing companies in the various industrial sectors on the Indonesian stock exchange cannot increase firm value by increasing debt, since the increase in debt also cannot increase profitability, which indirectly cannot increase firm value. This means that, with the additional profitability variable or the company's ability to earn profits moderated by hedging policies, firm size does not mediate firm value.

Hypothesis five, assumes that hedging policies moderate the direct effect of capital structure on firm value. Based on table 6, the results show that the interaction effect of capital structure and hedging policy is negative and significant ($b = -1.776$, $p < 0.001$) in predicting firm value, so H5 is accepted. The company's hedging policy is an activity designed to increase the company's value. In this case, investors will place a higher value on companies that engage in hedging activities. To avoid the risk of loss due to fluctuations in foreign currency exchange rates, the company must implement a hedging policy strategy to reduce exposure and other risks that can affect currency values in financing activities, which in turn will affect the value of the company. The higher the capital structure, which is balanced with hedging policies, is expected to reduce risk and increase the company's value.

Then the sixth hypothesis surmises that firm size moderates the direct effect of capital structure on firm value. Based on table 6, the results show that the interaction effect of capital structure and firm size is negative and significant ($b = -0.3906$, $p 0.001$) in predicting firm value, so H6 is accepted. The interaction coefficient shows a negative value, meaning that it can be assumed that firm size has a negative moderating effect on capital structure and firm value, meaning that firm size reduces the effect (weakens) of DER on firm value. With a large firm size, the company has large assets that can easily get operational costs in the form of debt, so that the company can increase its leverage, which results in a high level of risk. This is a negative signal to potential investors that large companies can increase debt, which can affect the value of the company. The results of this study support [52].

The seventh hypothesis, that hedging policy moderates the indirect effect of profitability on firm value, Based on table 6, the results show that the interaction effect of profitability and hedging policy is positive and not significant ($b = 0.8826$, $p > 0.05$) in predicting firm value, so H7 is rejected. Companies that are relatively large tend to use large amounts of external funds because the funds needed are increasing along with the company's growth. In this study, the company's size has no bearing on its ability to obtain additional external capital to fund its operational activities. Larger companies, on the other hand, will find it easier to obtain external funds in the form of large amounts of debt, which will aid the company's operational activities and cause productivity to rise. Hedging policies are required for foreign trade activities in order for the company's profitability and value to increase, but risk exposure will also increase due to transactions involving foreign currency, so hedging policies are required.

Then the eighth hypothesis predicts that firm size moderates the direct effect of profitability on firm value. Based on table 6, the results show that the interaction effect of profitability and firm size is positive and not significant ($b = 0.9142$, $p > 0.05$) in predicting firm value, so H8 is rejected. Firm size cannot strengthen the effect of profitability through firm value. Companies that have large firm sizes will certainly be easily recognized by the public and are considered to have better finances than companies that have small firm sizes. This causes the public to believe in the products and services marketed by companies that have a larger firm size. This will increase the company's sales so that the company's profitability will increase, and the welfare of shareholders, which is the benchmark for company value, will increase. This is not the case when a large firm size is not considered to have better finances either.

5. Conclusion

The results show that the more debt the company uses, the higher the value of the company at the optimal target capital structure, but it lowers the level of profitability. Hedging policies and firm size moderate the effect of the capital structure on firm value. Hedging policies are able to mitigate risks that arise due to a high capital structure, which has an impact on firm value. Furthermore, high total assets make it difficult for management to manage them so as to make the value of the company decrease. Any increase in debt that occurs in companies that have large total assets can reduce company value, but companies with small total assets with large amounts of debt can increase company value.

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