

# COMPARISON ANALYSIS OF THE CAPITAL STRUCTURE POLICIES OF FDI AND PMDN MANUFACTURING COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE FOR THE 2018-2021 PERIOD

Nur Azizah<sup>1</sup>, Agus Maulana<sup>2</sup>

<sup>1,2</sup>Management Study Program, Faculty of Economics and Business, Universitas Islam Indragiri, Indonesia.

\*e-mail: [nurazizaaaah23@gmail.com](mailto:nurazizaaaah23@gmail.com)

## Article Info

### Article History:

Received 05 19, 2023

Revised 05 25, 2023

Accepted 06 30, 2023

### Keywords:

Capital Structure

PMA

PMDN

Comparison Analysis

## Abstract

This research done on the objects of PMA and PMDN manufacturing companies listed on the IDX. Made as decision-making regarding company risk and a consideration for investors in determining investment decisions. The population and sample used in this research are 20 manufacturing companies selected using purposive sampling, consisting of 10 PMA manufacturing companies and 10 PMDN manufacturing companies for the 2018-2021 period. The data was processed with the help of Microsoft Excel and then tested with the Independent Sample T-test via SPSS 23. The results showed that there was a significant difference between the Capital Structure of PMA and PMDN manufacturing companies as seen from the average DER results for PMA companies of 0.99 and PMDN companies 0.53 and the results of the Independent Sample T-test sig (2 Tailed) 0.000 are smaller than 0.05.

## 1. Background problem

Economic development in the world is getting faster and faster. Likewise, the Indonesian economy in Indonesia is entering the free market era, where Indonesia's economic activities are supported by various types of industries. Broadly speaking, the industry in Indonesia is run by companies which are divided into two groups with different ownership status, namely: foreign-owned companies called Manufacture Multinational Corporate (MNC) and domestic-owned companies called Domestic Corporate (DC) (Soukotta, 2012). Multinational corporations are companies that are involved in international business and have equity interests in many countries. Meanwhile, domestic companies are companies whose business base includes the economic activities of one country or the scope of the national economy (Handayan 2016).

The company's funding decision can be seen from its capital structure. Najmuddin (2011) states that capital structure is a determination of a certain proportion of the total capital needed by a company to be funded with debt and equity. For company funding sources, it can come from internal and external company funds. The source of the company's funds comes from internal funds in the form of company profits (profits) that have not been distributed, while the company's external funding comes from investors, by issuing securities, both debentures and shares.

One of the company's external funding sources that is often used as a consideration by managers is debt. Debt is an attractive means of funding for companies to recapitalize and capital restructuring, because debt is used as a source of funds that has a fixed burden in the hope that it will provide additional, greater profits for shareholders. Within the scope of the trade off theory, Modigliani and Miller show that the use of debt will always be more profitable than the use of own capital (Brigham, Eugene F. & Houston 2010; Husnan and Toeat 2015). Myers and Majluf (1984) argue that the purpose of the trade off theory is to balance own capital with outside capital.

The ratio between sources of third party funds and debt that describes the company's structure is called DER (Debt to Equity Ratio). The DER ratio shows the level of risk of a company where the higher the DER ratio, the higher risk company. This gives an indication that the amount of the company's equity is not able to cover the quantity of the company's debt. According to Brigham (2015), investors are more interested in a certain DER level where the ratio is less than one, because a company's DER value that shows a value of more than one means that the debt coefficient in a company is higher than the amount of equity. As stated by Riyanto (1999) regarding the debt coefficient, namely the ratio between the amount of foreign capital and own capital may not exceed 1:1. This study uses a sample of non-financial companies, especially from the manufacturing sector that have been listed on the Indonesia Stock Exchange for the period 2018 to 2021.

To see significant differences from the two groups of companies above done different test using statistical analysis test with DER as material calculation Which compared to. Research on capital structure has been carried out a lot, but researchers who compare capital structure policies in MNC's with DC's still not so much. There are still many research gaps and debates in this comparison. Lee & Kwok (in Akhtar, 2005) who conducted a study of US companies showed that MNC's debt levels were lower than DC's. However, Akhtar (2005) with corporate objects in Australia found that the level of debt MNC's no different from DC's. While research conducted with developing country objects, including those conducted by Vera et al (2005) who made observations in Indonesia, showed MNC's with an average company size that is smaller than DC's have a lower level of debt compared to DC's. Research Chevalier et al (2006) also showed the same findings in Indonesia.

From several previous studies, there are still research gaps, the phenomenon of gaps in the field, as well as theoretical inconsistencies (not appropriate/changing) from practice in the field regarding the topic of capital structure. Based on the description above, this research takes the title "Comparative Analysis of Capital Structure Policies for PMA and PMDN Manufacturing Companies Listed on the Indonesian Stock Exchange for the Period 2018 - 2021".

## Problem Formulation

Based on the description in the background above. Then the research questions can be structured as follows: "Is there a significant difference in the capital structure policy between PMA and PMDN companies listed on the IDX in 2018 - 2021? ".

### **Purposes**

In accordance with the problems raised in the research, the purpose of this study is: "To find out whether there are significant differences in capital structure policies between PMA and PMDN companies listed on the IDX in 2018 - 2021"

## **2. LITERATURE REVIEW**

### **Capital structure theory**

#### **Agency Theory**

This theory was put forward by Michael C. Jensen and William H. Meckling in 1976. This theory explains the separation of control in companies in which management is the agent and shareholders are the owners of the company. This separation is often characterized by agency conflicts, namely differences in interests between shareholders and management. The personal interest between the two is evident in his view of the use of free cash flow.

Shareholders want free cash flow to be distributed to shareholders in the form of dividends, whereas managers want to use idle cash to develop the company so that their income indirectly increases. However, the policies of these managers are often faced with a negative NPV, so it becomes potential. Therefore, shareholders expect agents to act on their behalf, so they want to delegate authority to agents. Management must be given adequate incentives and supervision to be able to carry out its functions properly.

#### **Trade Off Theory**

The concept of trade off theory explains that the value of the company will increase along with an increase in leverage (due to the interest tax shield). The use of debt will stop until the expectation that agency costs, financial distress costs or bankruptcy costs are greater than the interest tax shield, so that the impact will reduce the value of the company. So DeAngelo and Masulis (1980) explain that the purpose of this theory is the balance of own capital with outside capital.

#### **Pecking Order Theory**

Myers and Majluf (in Husnan, 2002) stated that the pecking order theory is to determine the preference of the most preferred source of funds. This theory is based on information asymmetry, because management has more information about the prospects, risks, and value of the company, than public investors, because company management is the maker of financial decisions, and who prepares various company plans. This information asymmetry affects the choice of internal or external funding sources to be taken.

#### **Capital Structure**

According to financial expert I. M. Pandey, capital structure refers to a mix of long-term funding sources, such as debentures, long-term debt, preference share capital and equity share capital including reserves and surpluses. Financial expert John J. Hampton states that the capital structure is a combination of debt and equity securities which consist of financing the company's assets. In another sense, capital structure is the balance or comparison between own capital and foreign capital. In this sense, own capital is retained and company ownership, while foreign capital is in the form of short-term debt or long-term debt. The problem of capital structure is the balance between debt and capital regarding the company's funding sources with the aim of maximizing the value of the company and the company's shareholders. The value of the company will change or not if some of its own capital is replaced with debt or vice versa. If it turns out that changes in the company's capital structure have no effect on firm value, it means that there is no best capital structure (Husnan, 2002).

### Solvency Ratio

The definition of Solvency according to Irham (2011) is a picture of a company's ability to fulfill and maintain its ability to always be able to fulfill its obligations to pay debts in a timely manner. Meanwhile, according to I Made (2011) suggests that the solvency ratio is a measure of how much a company uses debt in company purchases. Companies that do not use debt means using 100% of their own capital. The solvency ratio that will be discussed in this study is the Debt To Equity Ratio. Debt To Equity Ratio (DER) is the ratio of debt to capital. This ratio measures how far the company is financed by debt, where the higher this ratio describes the symptoms that are not good for the company.

The increase in debt will in turn affect the size of the net profit available to shareholders including dividends received because their obligation to pay debts takes precedence over dividend distribution (Agus, 2001). The greater the value of the Debt To Equity Ratio indicates that the business capital structure utilizes more debt relative to equity. The higher the Debt To Equity Ratio (DER) reflects the company's relatively high risk, as a result investors tend to avoid stocks that have a high Debt To Equity Ratio (DER).

The Debt To Equity Ratio formula is:

$$THE = \frac{\text{Total debt}}{\text{Total Equity}}$$

In the matter of the Debt To Equity Ratio, it is necessary to understand that there is no limit to how much the Debt To Equity Ratio is safe for a company, but for conservatives, usually a Debt To Equity Ratio that exceeds 66% or 2/3 is considered risky. This ratio shows and describes the composition of capital structure of the ratio of total debt to total equity (capital) of the company used as a source of business funding. The greater the DER, the greater the capital structure utilizing debt to equity so that it reflects the company's relatively high risk. In this study the Debt To Equity Ratio approach is used as an independent variable which is one of the fundamental factors that measure debt to equity.

### Hypothesis

It is suspected that there are significant differences between the capital structure policies between PMA and PMDN manufacturing companies listed on the Indonesia Stock Exchange in 2018-2021.

## 3. RESEARCH METHODS

Based on the type of data, this research is categorized as quantitative research. Quantitative research is research to describe the state of a company done with analysis based on the quantitative data obtained. According to Sugiyono (2018) quantitative data is a research method that is based on positivist (concrete data), research data in the form of numbers be measured using statistics as a means of calculating the test, relating to the problem researched to come up with a conclusion. Philosophy Positivism used in a particular population or sample.

This research was conducted on PMA and PMDN manufacturing companies listed on the IDX because the dependent variable in this study is Capital Structure (Leverage) in PMA and PMDN Manufacturing Companies listed on the Indonesia Stock Exchange for the 2018-2021 period. In doing study The researchers started conducting research from October 2022 to March 20, 2023.

The population used in this study were manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period 2018 – 2021. In this study, there were quite a number of population members, so researchers used a sampling technique to facilitate research.

In selecting the sample for this study, the researcher used a purposive sampling method. Sugiyono (2011) explains that purposive sampling technique determination of the sample with certain considerations, this is to facilitate research. The purpose of this method is to get a sample based on certain considerations criteria - criteria

that have been determined with the aim of obtaining a representative sample. So that consideration used in this study are as follows:

1. Manufacturing companies listed on the Indonesia Stock Exchange during the 2018–2021 period.
2. Manufacturing companies that continue to report financial statements for 4 consecutive years, namely 2018 – 2021.
3. company that owns complete data during the study period related to the factors studied.
4. Companies that have positive net income during the study period (During 2018-2021).

Based on the predetermined criteria, obtained as many as 20 companies that meet the criteria as a sample. Where the number of PMA companies is 10 companies and PMDN is 10 companies. The research sample can be seen in table 1 in the following.

**Table 1. List of Names of Company Samples in Research**

No	PMA company	PMD Company
1	PT. Arwana Citramulia Tbk.	PT. Charoend Pokphand Indonesia Tbk.
2	PT. Astra International Tbk.	PT. Gudang Garam Tbk
3	PT. Delta Djakarta Tbk.	PT. Indospring Tbk
4	PT. Darya-Varia Laboratoria Tbk.	PT. Kimia Farma Tbk.
5	PT. Bayan Resources Tbk	PT. Kalbe Farma Tbk.
6	PT. Indofood Sukses Makmur Tbk	PT. Mayora Indah Tbk.
7	PT. Japfa Comfeed Indonesia Tbk.	PT. Mustika Ratu Tbk
8	PT. Merck Tbk	PT. Happy Perfect Tbk.
9	PT. Multi Bintang Indonesia Tbk.	PT. Tempo Scan Pacific Tbk
10	PT. Unilever Indonesia Tbk.	PT. Ultrajaya Milk Industry & Trading
	<b>Total : 10</b>	<b>Total : 10</b>

Source: IDX

The capital structure variable used in this study is DER (Debt To Equity Ratio). Where X1 is DER PMA and X2 is DER PMDN.

#### 4. RESULTS AND DISCUSSION

##### Comparison of DER for FDI and PMDN Manufacturing Companies

**Table 2. Table of Comparison of DER of Manufacturing Companies for PMA and PMDN**

No.	PMA company code	THE (X1)	THE (X2)	PMDN company code
1.	ARNA	0.55	0.43	CPIN
2.	ARNA	0.53	0.44	CPIN
3.	ARNA	0.51	0.33	CPIN
4.	ARNA	0.43	0.44	CPIN
5.	Asia	0.98	0.53	GGRM
6.	Asia	0.88	0.52	GGRM
7.	Asia	0.74	0.34	GGRM
8.	Asia	0.71	0.44	GGRM
9.	DLTA	0.19	0.13	INDS
10.	DLTA	0.18	0.13	INDS
11.	DLTA	0.20	0.1	INDS
12.	DLTA	0.30	0.14	INDS
13.	DVLA	0.40	1.73	KAEF
14.	DVLA	0.40	1.26	KAEF

No.	PMA company code	THE (X1)	THE (X2)	PMDN company code
15.	DVLA	0.50	1.56	KAEF
16.	DVLA	0.51	1.6	KAEF
17.	THEN	0.7	0.19	KLBF
18.	THEN	0.8	0.21	KLBF
19.	THEN	0.88	0.25	KLBF
20.	THEN	0.47	0.21	KLBF
21.	INC	0.93	1.05	MYOR
22.	INC	0.77	1.02	MYOR
23.	INC	1.06	0.76	MYOR
24.	INC	1.07	0.82	MYOR
25.	JPFA	1.26	0.39	MRAT
26.	JPFA	1.20	0.38	MRAT
27.	JPFA	1.27	0.63	MRAT
28.	JPFA	1.36	0.66	MRAT
29.	BRAND	1.45	0.3	SMSM
30.	BRAND	0.52	0.26	SMSM
31.	BRAND	0.52	0.25	SMSM
32.	BRAND	0.5	0.34	SMSM
33.	MLBI	1.47	0.45	TMPO
34.	MLBI	1.53	0.4	TMPO
35.	MLBI	1.03	0.46	TMPO
36.	MLBI	1.67	0.44	TMPO
37.	UNVR	1.75	0.16	ULTJ
38.	UNVR	2.91	0.17	ULTJ
39.	UNVR	3.16	0.2	ULTJ
40.	UNVR	3.41	0.88	ULTJ
	Rate-rate	0,99	0,53	

Source: Data processed by the author

### Normality test

**Table 3. Results of the Normality Test of the One-Sample Kolmogorov-Smirnov Test**

			Standardized Residual for TRANS
N			80
Normal Parameters <sup>a,b</sup>	Mean		.0000
	Std. Deviation		.99365
Most Extreme Differences	Absolute		.124
	Positive		.124
	Negative		-.082
Test Statistic			.124
Asymp. Sig. (2-tailed)			.004 <sup>c</sup>
Monte Carlo Mr. (2-tailed)	Say.		.153 <sup>d</sup>
	99% Confidence Interval	Lower Bound	.144
		Upper Bound	.163

Source: Processed with Spss 23

In table 4.2 above it is known that the Monte Carlo sig value of 0.153 is greater than 0.05 so that it can be concluded that the company data is normally distributed. In this way the first condition for testing the independent sample t test is fulfilled.

### Homogeneity Test

**Table 4. Homogeneity test results**

F	df1	df2	Sig.
2.122	1	78	.149

Source: Processed with Spss 23

From table 4.5 on it is known that the sig value of 0.149 is greater than 0.05 then it can be concluded that the variance of the capital structure variable is homogeneous. So that the assumption of homogeneity in the independent sample t test is fulfilled.

### Independent Sample T-test

**Table 5. Independent Samples Test Results**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
THE	Equal variances assumed	2.122	.149	3.870	78	.000	.26075	.06739	.12660	.39491
	Equal variances not assumed			3.870	73.110	.000	.26075	.06739	.12646	.39505

Source: Processed with SPSS 23

From table 4.4 above it is known that the sig (2-tailed) value is 0.000 < 0.05. Then  $H_1$  or the hypothesis is accepted, which means that there is a significant difference between the capital structure of PMA and PMDN companies.

### Discussion

In the above research results is known from table 4.1 that the average DER of foreign companies is 0.99 or 99%. And PMDN 0.53 or 53%. This shows that FDI companies are more at risk than PMDN companies, because the DER ratio of PMA companies that exceeds 66% or 2/3 is considered to be at risk.

High DER yields for FDI manufacturing companies compared to PMDN indicates that the business capital structure of PMA companies utilizes more debt relative to equity than PMDN companies. A DER that is too high has a negative impact on company performance, because a higher debt level indicates that the company's interest expense will be greater and reduce profits. So that the greater the debt (DER) tends to lower the stock price (Putri, 2012).



According to Irham (2011) the greater the value of the Debt To Equity Ratio indicates that structured business capital utilizes more debt relative to equity. The higher the Debt To Equity Ratio (DER) reflects the company's relatively high risk, as a result investors tend to avoid stocks that have a high Debt To Equity Ratio (DER).

That way already confirmed that the capital structure of PMA and PMDN companies is different is supported by the results of the independent sample t test which states that the sig. 0.000 is less than 0.05, which means there is a significant difference between the capital structure of PMA and PMDN companies listed on the Indonesian Stock Exchange for the 2018-2021 period.

## 5. CONCLUSION

1. In this research it is known in table 4.1 that the average DER value of foreign companies is 0.99 greater compared to PMDN companies that have an average DER of 0.53. This shows that FDI companies are more at risk than PMDN companies, because the DER ratio of PMA companies that exceeds 66% or 2/3 is considered to be at risk. The greater the Debt To Equity Ratio value indicates that structure business capital utilizes more debt relative to equity. The higher the Debt To Equity Ratio (DER) reflects the company's relatively high risk, as a result investors tend to avoid stocks that have a high Debt To Equity Ratio (DER).
2. That way already confirmed that the capital structure of PMA and PMDN companies is different, as evidenced by the hypothesis testing of the results of the independent sample t-test which states that the sig. 0.013 is smaller than 0.05 which means H1 or Hypothesis 1 is accepted, which means that there is a significant difference between the capital structure of PMA and PMDN companies listed on the Indonesian stock exchange for the 2018-2021 period.

## 6. SUGGESTION

1. For future researchers who wish to conduct further research related to capital structure, it is best to use more corporate sectors, so that the results can be generalized to other corporate sectors. Because this research only examines the manufacturing industry, there is no research yet covering all types of industries in Indonesia, besides that the number of samples used is relatively small.
2. For future researchers who wish to conduct further research related to capital structure, they can add other variables or a longer research year period because in this study the research period is relatively short, considering that other studies generally use a time period of up to more than 10 years.

## BIBLIOGRAPHY

- [1] Agus, Sartono 2001. Financial management theory and application edition fourth. Yogyakarta BEF
- [2] Akhtar, Hossain. (2005). The Sources and Dynamics of Inflation in Indonesia. Journal of Applied Econometrics and International Development. Vol. 5.
- [3] Akhtar, S., & Oliver, B. (2009). Determinants of Capital Structure for Japanese Multinational and Domestic Corporations. International Review of Finance, 9, 1–26
- [4] Augusty Ferdinand. 2007. Management Research Methods. Semarang: Diponegoro University Publishing Agency. Brigham, Eugene F. and J.F. Houston. 2010. Fundamentals of Financial Management. Edition 11. Jakarta: Salemba Empat.
- [5] Bambang Riyanto, 1999. Fundamentals of Spending. BPFE.Yogyakarta.Suad, Husnan, 1996, Financial Management Theory and Application (Long Term Decisions), Issue 4, BPFE, Yogyakarta
- [6] Bambang Riyanto, 1999. Fundamentals of Spending. BPFE.Yogyakarta.Husnan, Suad, 2002, Financial Management Theory and Practice, Yogyakarta Gajah Mada Publishing Agency Foundation, Yogyakarta.p
- [7] Brigham, E.F., & Houston, J.F (2015). Financial management. Jakarta; Erlangga.
- [8] Brigham, F., & Houston, J. (2011). Fundamentals of Financial Management (11th edition ed). Salemba Four
- [9] Chevalier, J. A., & Mayzlin, D. (2006). The Effect of Word of Mouth on Sales: Online Book Reviews. Journal of Marketing Research, 43, 345-354.



- [10] DeAngelo, H., Masulis, R. W. (1980). Optimal Capital Structure under Corporate and Personal Taxation. *Journal of Financial Economics*, 8 (1): 3-29.
- [11] Fahmi, Irham. 2011. *Analysis of Brigham, Eugene F. and Joel F. Houston. 2014. Fundamentals of Financial Management. Book 1. Edition 11. Jakarta: Salemba Four Financial Statements. Lampulo: ALPHABET*
- [12] Ghozali, Imam. (2011). *Multivariate Analysis Application with IBM SPSS 19 Program (5th ed.)*. Semarang: Undip Publishing Agency.
- [13] Handayani Anita. 2016. "Capital Structure of Multinational Companies and Domestic Companies on the LQ 45 Index." Sumatra: Faculty of Economics, University of Muhammadiyah Gresik.
- [14] Husnan, Suad, 2002, *Financial Management Theory and Practice*, Foundation for the Gajah Mada Publishing Agency, Yogyakarta, Yogyakarta.
- [15] I Made Sudana. 2011. *Theory and Practice of Corporate Financial Management*. Jakarta: Erlangga
- [16] Myers, S. C., dan N. S. Majluf. (1984). Corporate Financing and Investment Decision When Firm Have Information That Investors do not Have. *Journal of Financial Economic*, Vol. 13 (2): 187-221
- [17] Najmuddin. 2011. *Financial Management and Modern Syar'iyyah Actualization*. Yogyakarta: C.V Andi Offset.
- [18] Sugiyono. (2011). *Quantitative Qualitative Research Methods and Alphabet R & D*.
- [19] Sugiyono. (2018). *Combination Research Methods (Mixed Methods)*. Bandung: CV Alfabeta.
- [20] Sugiyono. (2018). *Quantitative Research Methods*. Bandung: Alfabet.
- [21] Vera J, et al. (2005) Yeast system as a model to study Moloney murine leukemia virus integrase: expression, mutagenesis and search for eukaryotic partners. *J Gen Virol* 86(Pt 9):2481-2488