

# The Role of Capital Structure Mediated the Effect of Profitability and Liquidity on Firm Value in 2014-2017

Krisma Deana<sup>1</sup>, I Putu Yadnya<sup>2</sup>

<sup>1,2</sup>Udayana University

<sup>1,2</sup> Faculty of Economics and Bussiness, Bali, Indonesia

---

**Abstract:** Firm Value is the investor's perception of the company's success rate that is often associated with stock prices. High stock prices make Firm Value also high, and increase market confidence not only in the company's current performance, but also in the company's future prospects, which can be measured by profitability and liquidity. The purpose of this study was to determine the effect of profitability and liquidity on Firm Value with Capital Structure as a mediating variable in 2014-2017. The study population includes all sea transportation companies listed on the Indonesia Stock Exchange in the 2014-2017 period. The sampling method used is the purposive sampling method, namely the determination of the sample using certain considerations in selecting the sample. The research population data were 41 companies and obtained a sample of 20 companies. Based on the results of the analysis, it was found that profitability had a negative and not significant effect on firm value. Liquidity has a positive and significant effect on firm value. Capital Structure has a negative and significant effect on firm value. Profitability has a negative and not significant effect on capital structure. Liquidity has a positive and significant effect on capital structure. Profitability has an indirect and insignificant influence on Firm Value when mediated by capital structure, liquidity has an indirect and insignificant influence on firm value when mediated by capital structure.

**Keywords:** Profitability, Liquidity, Firm Value, dan Capital Structure.

---

## I. INTRODUCTION

The phenomenon that occurs regarding stocks in Indonesia shows that the public interest in the transportation sector is quite high. This is supported by Central Bureau of Statistics data which recorded the transportation and trade sector as the second highest growth sector in the first quarter of 2018, which grew 8.59% compared to the same period last year (Roy, 2018). Regulation of the Minister of Trade No. 82 of 2017 concerning Provisions for the Use of Sea Transportation and National Insurance for the Export and Import of Certain Goods. This regulation requires the export of CPO, coal and rice to use sea transportation controlled by local companies and national insurance. This means that all export and import goods shipping activities which previously used mostly foreign vessels will use domestic vessels, resulting in an increase in the movement of shares in the sea transportation sector (Hidayat, 2018).

These conditions make company competition in the business world become increasingly tight. The high intensity of public needs for service companies, especially in the field of transportation, causes the price of transportation shares to continue to increase and means to increase Firm Value. With the Firm Value getting better, the company will be seen as more valuable by potential investors. Firm Value basically can be measured through several aspects, one of which is the market price of the company's shares because the market price of the company's shares reflects the overall investor valuation of each owned equity. The stock market price shows the central valuation of all market participants, the stock market price acts as a barometer of the company's management performance (Gultom, *et. al.*, 2013).

According to Arif (2015) Firm Value can reflect the value of assets owned by companies such as securities. There are several factors that affect Firm Value, namely: dividend policy, capital structure, company growth, profitability, liquidity,

company size and others. Some of these factors have an inconsistent relationship and influence on Firm Value. For example, as a result of Meythi's research (2012) which states that there is a significant influence between Capital Structure and Firm Value, the greater the Capital Structure, the Firm Value will also increase. Then the research Nenggar Bestariningrum (2015), Gilang Ramadhan Fajri, and Dwi Asih Surjandari, (2016), Ammara Asif, and Bilal Aziz, (2016), Prana Wahyu *et. al.*, (2016), found that Capital Structure has a positive effect on Firm Value. While research Fau (2015) obtained the results that the Capital Structure partially had a negative and significant effect on Firm Value and the research of Thaib and Dewantoro (2017) and Makkulau *et al.* (2018) found that Capital Structure has a positive and not significant effect on Firm Value.

One that affects Firm Value is the company's Capital Structure. Primary and Wirawati. (2016) Increased Firm Value required a Capital Structure that sets out in a company funding policy to determine profitability. It is important to know in a company with a good Capital Structure. Comparison of loan capital with own capital must be right because the comparison will directly affect the company's financial position. Financial Value is not only influenced by Capital Structure, but there are other factors that can indirectly affect Firm Value through the determination of its capital structure such as profitability, liquidity and others. (Manu *et. al.*, 2014).

Profitability is the ability of a company to make a profit through its business operations by using asset funds owned by the company (Kusuma *et. al.*, 2012). According to Sari (2014) one of the important indicators in influencing Firm Value is to see the extent to which a company can provide profitability for investors. This is because the goal of investors investing (investing) in a company is how the company can provide mutual benefits in the form of dividends. Therefore Profitability is believed to have an influence on the value of the company. Based on the results of Thaib and Dewantoro (2017) research, it can be explained that Profitability has a negative and not significant effect on Firm Value. This means that the profit of a company has no influence on Firm Value. This is contrary to the results of research Marchyta (2015), Indra (2012), Sari (2014), Manu (2014) Arif (2015), and Rina (2012) which states that profitability has a positive effect on Firm Value where basically Profitability shows the ability the company obtained from net profit from net sales and can also measure the ability of the company's management in carrying out its operational activities to minimize the company's burden and maximize company profits. However, different results obtained Purwohandoko (2017) which shows that profitability has a significant negative effect on Firm Value.

In addition to profitability, Firm Value is also influenced by Liquidity. According to Indra (2012) Company liquidity is the company's ability to fulfill its short-term obligations on time. Companies that have high profits may not be able to pay dividends to shareholders because there are no funds to pay dividends. A company that is able to meet its financial obligations in a timely manner means that the company is in a liquid state and the company has a means of payment or assets that are greater than its current debt. So, by looking at a company's liquidity the creditor can also assess the merits of a company.

Companies that have a high level of liquidity indicate the opportunity to grow the company tends to be high. The more liquid a company is, the higher the level of creditor confidence in lending funds, so as to increase Firm Value in the eyes of creditors and potential investors (Gultom, *et. al.*, 2013). But different things were obtained by Thaib and Dewantoro (2017) research which found that Liquidity had a negative and not significant effect on Firm Value. This means that a company's Liquidity has no influence on Firm Value. This contradicts the results of research Marchyta (2015), Hamidy (2015), Widowati (2016), Dewi (2014), Indra (2012), Sari (2014), Manu (2014), Arif (2015), Rina (2012) which states that Capital Structure has a positive effect on Firm Value stating that Liquidity has a positive effect on Firm Value where Liquidity is the company's ability to meet its short-term obligations which can increase Firm Value because of the low debt value but high Liquidity value also shows a lot of company funds unemployed which ultimately reduces the company's profitability.

Profitability and Liquidity can not only affect Firm Value, but can also affect Capital Structure. According to Addae, *et al* (2013) Capital Structure is a source of composition of funds managed by companies in carrying out their business activities to obtain such a level of profitability. The results of the Thaib and Dewantoro (2017) study explain Profitability has a positive and not significant effect on Capital Structure. In this case it is said that profitability does not significantly affect the capital structure seen from the results of research that are not significant. The results of this study are not in line with the results of the study by Nantyo (2014), and Wijaya (2014), which states that profitability has a positive effect on Capital Structure. This is because the higher the profits obtained by the company makes the need for funds, especially from investors both in the short and long term the smaller. Companies with a high level of profitability tend to use internal funds for operational and investment purposes.

Capital Structure can also be influenced by Liquidity, where in the results of Nantyo's (2014) research stated that liquidity has a positive effect on Capital Structure. This happens because companies that already benefit from more liquid equity will be more motivated to use more of their own capital than to use long-term debt. The results of this study companies with a high or short liquidity do not affect the Capital Structure because the company strives to with a high Liquidity does not influence the increasing financing to meet working capital and investment. While the Thaib and Dewantoro research (2017) explains that Liquidity has a positive and not significant effect on Capital Structure. This means that a company's liquidity has no influence on capital structure. Basically Liquidity is the company's ability to meet its short-term obligations which of course can increase Firm Value because the value of the debt is small but the high Liquidity value also shows a lot of idle company funds which ultimately reduces the company's profitability. And this is what can improve Capital Structure so that creditors are also more interested in giving credit to the company. In this result it is said that Liquidity does not significantly affect the capital structure seen from the results of research that are not significant.

In addition to the direct effect of Profitability and Liquidity on Capital Structure and Firm Value, previous research findings have also been found that show the indirect effect of Profitability and Liquidity on Firm Value through mediation of Capital Structure. Like Thaib and Dewantoro's research (2017) which explains Profitability has a insignificant direct effect on Firm Value but when mediated by Capital Structure has a significant effect on Firm Value on public sea transportation companies. This is in line with the pecking order theory which states that to obtain internal funds, companies with high profitability can use internal funds before using debt to meet corporate funding decisions (Wijaya, 2014).

The effect of Capital Structure in mediating the relationship of Liquidity to Firm Value is also explained in the research of Thaib and Dewantoro (2017) which states that Liquidity has a direct effect that is not significant to Firm Value but when mediated by Capital Structure has a significant effect on Firm Value in transport companies general sea. This is not in line with Nantyo (2014) describing the Company in running a business and its business requires funds, funds obtained from company owners or debt. Funds received by the company are used to purchase fixed assets in producing goods and services, purchase materials for production and sales, issue trade receivables and hold cash inventories and buy securities which are often called securities or securities both for transactions and to maintain corporate liquidity.

## **II. CONCEPTUAL MODEL AND HYPOTESIS DEVELOPMENT**

### **The Effect of Profitability on Firm Value**

Ernawati (2016) states that high profitability reflects the company's ability to generate high profits for shareholders. With a company that has a high profitability ratio, it will attract investors to invest their capital. Research conducted by Ernawati (2016), Damayanti (2016), Prasetyorini (2013), Suksmana (2015), and Wulandari (2013), Chen, Li-Ju; Chen, Shun-Yu (2011) show that profitability has a significant positive effect on firm value. Based on the description, the higher the profitability of a company, the higher its firm value. So, profitability has a positive influence on the value of a company. Based on the explanation above, the following hypothesis is formulated:

**H<sub>1</sub>: Profitability has a positive effect on firm value.**

### **The Effect of Liquidity on Firm Value**

Gregory Paulus Tahu, (2017), Nadya Marsha, and Isrochmani Murtaqi, (2017), Wulandari (2013) The higher Liquidity shows the greater current assets owned by the company compared to its current liabilities. The concept of pecking order theory states that companies that have high liquidity show that the company has excess current assets sufficient to fund the company's operations without having to owe, so that it will reduce debt in the company's capital structure. So, Liquidity has a positive and significant effect on the value of a company. Based on the explanation above, the following hypothesis is formulated:

**H<sub>2</sub>: Liquidity has a positive and significant effect on Firm Value**

### **The Effect of Capital Structure on Firm Value**

According to Handayani (2011) Capital Structure is a balance between debt and own capital. Then Brealey et. al, (2008: 6) defines Capital Structure is fundraising needed by companies for investment and operational activities. Funding decision making regarding the Capital Structure that really must be considered by the company, because the structure of determining the company will affect the firm value (Meythi, 2012). Capital Structure shows the comparison of the amount of long-term debt with own capital. Companies that use debt in their operations will get tax savings, where taxes are

calculated from operating income that has been reduced by debt interest, so that the net income that is entitled to shareholders will be greater than companies that do not use debt.

Thus the firm value also becomes greater. This means that the greater the Capital Structure, the firm value will also increase. However, the company will not be able to use 100% debt in its capital structure. That is because the greater the debt, the greater the financial risk of the company. The risk in question is financial risk, the risk arising from the inability of companies to pay interest and principal installments in a bad economic situation. In such conditions the greater the debt the firm value will decrease. Companies must be able to determine the amount of debt, because with the debt to a certain extent will be able to increase firm value. However, if the amount of debt exceeds a certain limit it will reduce the firm value. Research conducted by Nenggar Bestariningrum, (2015), Gilang Ramadhan Fajri, and Dwi Asih Surjandari, (2016), Ammara Asif, and Bilal Aziz, (2016), can be seen that Capital Structure has a positive effect on firm value. Where this statement is supported by Modigliani-Miller (MM) theory, namely Capital Structure influences firm value. Based on the explanation above, the following hypothesis is formulated:

**H<sub>3</sub>: Capital Structure has a positive effect on Firm value.**

#### **The Effect of Profitability on Capital Structure**

Profitability is the company's ability to generate profits or profits. Pecking Order Theory is a theory that prioritizes funding sources from within. According to this theory, it states that: (1) companies like funding from operating companies in the form of retained earnings (internal financing) and (2) if external funding is needed, the company will issue the safest securities first, namely by issuing bonds (Nugrahani and Sampurno, 2012). Thus companies that have high profitability will set aside the profit into retained earnings. With the existence of retained earnings, the company does not need external funding, because the retained earnings are used to finance the company's operational activities. With retained earnings or derived from large capital itself will affect the Capital Structure is small. Sampurno and Guna's research (2018) also states that profitability proxied by return on equity (ROE) has a significant positive effect on Capital Structure. But this research does not agree with research Purwohandoko, (2017), Dharmawan (2015), and Kartika and Dana (2015) Okyana Nur Safitri et. al, (2014) shows that profitability has a significant negative effect on Capital Structure. Based on the description the hypotheses in this study are:

**H<sub>4</sub>: Profitability has a negative effect on Capital Structure.**

#### **The Effect of Liquidity on Capital Structure**

According to the Pecking Order Theory, companies that have high liquidity will tend not to use debt financing. This is due to companies with high liquidity levels that have large internal funds, so that the company will use its internal funds first to finance its investment before using external financing through debt. Ardiana and Adiyana (2014) in their research stated that Liquidity had a positive and significant effect on Capital Structure. Widati and Farisa (2017) in their research stated that the level of Liquidity had a significant negative effect on Capital Structure. Based on the description the hypotheses in this study are:

**H<sub>5</sub>: Liquidity has a negative effect on Capital Structure**

#### **The Effect of Capital Structure Mediating Profitability on Firm Value**

The results of the Thaib and Dewantoro (2017) study explained that Profitability has an insignificant direct effect on Firm value but when mediated by Capital Structure it has a significant direct effect on Firm Value on public sea transportation companies. This is in line with Wijaya's research (2014) which explains that based on pecking order theory to obtain internal funds, companies with high profitability can use internal funds first before using debt to meet corporate funding decisions. explained by the Trade-off Theory where the benefits of increasing debt are still greater than the sacrifices incurred so that the benefits directly from the use of debt increase firm value. From the previous research hypothesis can be drawn as follows:

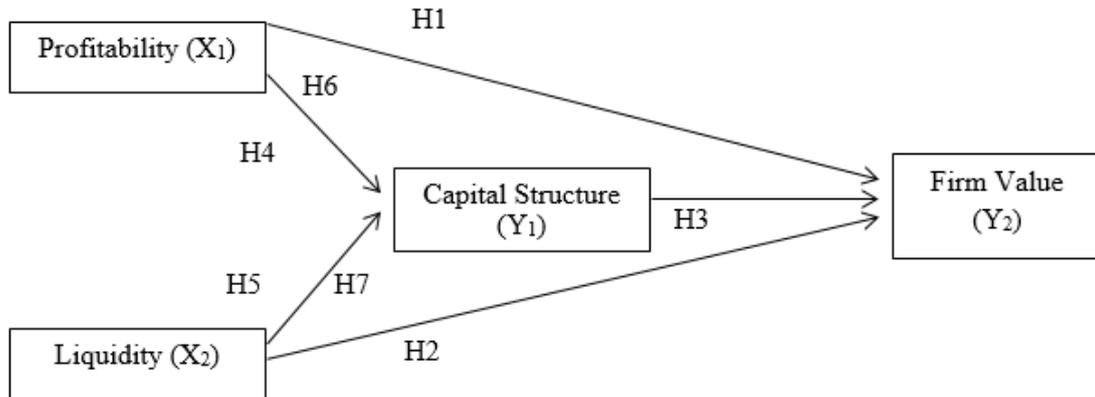
**H<sub>6</sub>: Profitability has a direct and significant influence on Firm value when mediated by Capital Structure.**

#### **The Effect of Capital Structure Mediating Liquidity on Firm Value**

The results of the Thaib and Dewantoro (2017) study explained that Liquidity has an insignificant direct effect on Firm value but when mediated by Capital Structure has a non-significant direct effect on Firm value on public sea transportation companies. This is not in line with Nantyo (2014) and Dwi Retno Wulandari (2013) describing the Company in running a business and its business requires funds, funds obtained from company owners and debt. Funds

received by the company are used to purchase fixed assets in producing goods and services, purchase materials for production and sales, issue trade receivables and hold cash inventories and buy securities which are often called securities or securities both for transactions and to maintain Company Liquidity. From the previous research hypothesis can be drawn as follows:

**H<sub>7</sub>: Liquidity has a direct and insignificant influence on Firm value when mediated by Capital Structure.**



**Figure 1: Conceptual Model**

### III. RESEARCH METHODOLOGY

The approach used in this research is a quantitative approach that is associative. The location of the study was conducted by downloading financial statement data from the official website of the Indonesia Stock Exchange (IDX), namely [www.idx.co.id](http://www.idx.co.id), while the scope of this study was the Sea Transportation Companies listed on the Indonesia Stock Exchange 2014 - 2017. The population used in This research is a company that is categorized into the sea transportation sector which is listed on the Indonesia Stock Exchange (IDX) in the period 2014 - 2017, amounting to 41 companies. The selection of this research sample is through purposive sampling method. Purposive sampling method, which is one technique in determining samples that uses certain considerations in selecting the sample. The companies that were sampled in this study were 20 companies. This research uses path analysis and data processing techniques carried out using SPSS (Statistical Program and Service Solution).

### IV. RESEARCH FINDING AND DISCUSSION

Based on table 1 below shows that the amount of data used in this study is 80 sample data obtained from the annual report with a span of 4 years, namely from 2014 to 2017. Based on the results of the descriptive statistical tests shown in Table 1, the Profitability variable (X<sub>1</sub>) has the lowest (minimum) value of -17,670 and the highest value (maximum) of 71,260. While the standard deviation is 13,095 and the mean value is 6.56. Variable Liquidity (X<sub>2</sub>) has the lowest value (minimum) 0.075 and the highest value (maximum) 216.73. Meanwhile, the standard deviation is 37,074 and the mean value is 34,901. The Capital Structure variable (Y<sub>1</sub>) has the lowest value (minimum) 0.08 and the highest value (maximum) 1.517. Meanwhile, the standard deviation is 0.326 and the mean value is 0.606. Firm value variable (Y<sub>2</sub>) has the lowest value (minimum) 0.208 and the highest value (maximum) 4.2. Meanwhile, the standard deviation is 0.885 and the mean value is 1.69.

**TABLE 1: THE RESULT OF DESCRIPTIVE ANALYSIS**

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Firm value	80	0,208	4,2	1,69	0,885
Profitability	80	-17,670	71,260	6,56	13,095
Liquidity	80	0,075	216,73	34,901	37,074
Capital Structure	80	0,08	1,517	0,606	0,326

Source: data processed, 2019

**TABLE 2: THE RESULT OF PATH ANALYSIS 1**

$Y_1 = (-0,293)X_1+0,393X_2$	
Se = 0,004	0,001
t = -1,778	2,379
Sig t = 0,079	0,020
R <sup>2</sup> = 0,068	F = 2,830
	Sig = 0,038

Source: data processed, 2019

The results of substructural path analysis 1 have been presented in table 2, then the structural equation is as follows:

$$Y_1 = pY_1X_1+pY_1X_2+e_1$$

$$Y_1 = (-0,293)X_1+0,393X_2+e_1$$

**TABLE 3: THE RESULT OF PATH ANALYSIS 2**

$Y_2 = (-0,018)X_1+0,483 X_2+(-0,225)Y_1$		
Se = 0,010	0,004	0,283
t = -0,114	3,091	-2,167
Sig t = 0,079	0,020	0,003
R <sup>2</sup> = 0,234	F = 7,722	
	Sig = 0,000	

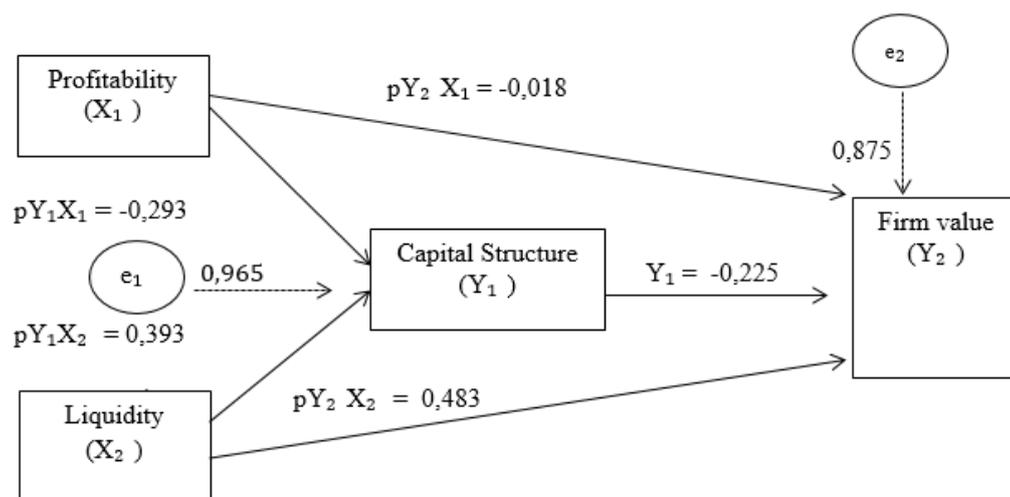
Source: data processed, 2019

The results of substructural path analysis 2 have been presented in table 3, then the structural equation is as follows:

$$Y_2 = pY_2X_1+pY_2X_2+pY_2Y_1+e_2$$

$$Y_2 = (-0,018)X_1+0,483 X_2+(-0,225)Y_1+e_2$$

The total determination coefficient value is 0.288 which means that 28.8 percent of firm value variation is influenced by Profitability, Liquidity, and Capital Structure, while the remaining 71.2 percent is explained by other factors not included in the model.



**Figure 2: The Final Path Analysis Model**

The final path analysis model has been illustrated in Figure 2, then the magnitude of the direct effect, indirect effect and the total effect between variables can be calculated. Calculation of influence between variables is shown in Table 4 and Table 5.

**Table 4: Direct Effect, Indirect Effect, Total Effect to Profitability (X<sub>1</sub>), Capital Structure (Y<sub>1</sub>) and Firm Value (Y<sub>2</sub>)**

Variable Effect	Direct Effect	Indirect Effect to Capital Structure Y <sub>1</sub> = (pX <sub>1</sub> Y <sub>1</sub> x pY <sub>1</sub> Y <sub>2</sub> )	Total Effect
X <sub>1</sub> → Y <sub>1</sub>	-0,293	-	-0,293
X <sub>1</sub> → Y <sub>2</sub>	-0,018	0,065	0,047
Y <sub>1</sub> → Y <sub>2</sub>	-0,225	-	-0,225

Source: data processed, 2019

The results in table 4 show the direct effect of profitability on firm value of -0.018, while the indirect effect mediated by the Capital Structure shows a beta coefficient of 0.065. These results prove that Capital Structure is not able to mediate the effect of profitability on firm value with a total effect obtained of 0.047.

**Table 5: Direct Effect, Indirect Effect, Total Effect to Liquidity (X<sub>2</sub>), Capital Structure (Y<sub>1</sub>) and Firm Value (Y<sub>2</sub>)**

Variable Effect	Direct Effect	Indirect Effect to Capital Structure Y <sub>1</sub> = (pX <sub>1</sub> Y <sub>1</sub> x pY <sub>1</sub> Y <sub>2</sub> )	Total Effect
X <sub>2</sub> → Y <sub>1</sub>	0,393	-	0,393
X <sub>2</sub> → Y <sub>2</sub>	0,483	-0,088	0,395
Y <sub>1</sub> → Y <sub>2</sub>	-0,225	-	-0,225

Source: data processed, 2019

The results in table 5 show the direct effect of Liquidity on the firm value of 0.483, while the indirect effect mediated by the Capital Structure shows a beta coefficient of -0.088. These results prove that Capital Structure is not able to mediate the effect of profitability on firm value with a total effect obtained of 0.395.

**a) Sobel test results on the Effect of Profitability on Firm Value mediated by Capital Structure**

Based on the sobel test results in this study showed that the results of  $Z = 0.795 < 1.96$ . These results mean that Capital Structure does not mediate profitability towards firm value.

**b) Sobel test results on the Effect of Liquidity on Firm Value mediated by Capital Structure**

Based on the sobel test results in this study showed that the results of  $Z = 0.795 < 1.96$ . These results mean that Capital Structure does not mediate liquidity against firm value.

**The Effect of Profitability on Firm Value**

In accordance with the hypothesis proposed that Profitability has a positive effect on firm value, in table 4.12 it is known that the path coefficient value obtained from the relationship between the Profitability variable with the firm value of -0.001 with a significance value of 0.909 which is greater than  $\alpha = 0.05$ . This means that the profitability variable is negative and not significant to the firm value of sea transportation companies listed on the IDX. Every increase in profitability using ROA does not affect the firm value. The hypothesis states that profitability has a positive effect on firm value, but the results show that profitability is negative and insignificant so that the proposed hypothesis is not proven so that the proposed hypothesis is rejected.

The results of this study support research conducted by Thaib and Dewantoro (2017) which explains Profitability has a negative and not significant effect on firm value. This means that a company's profits do not have an influence on firm value. This is contrary to the results of research Marchyta (2015), Indra (2012), Sari (2014), Manu (2014) Arif (2015), and Rina (2012) which states that profitability has a positive effect on firm value where basically Profitability shows the ability the company obtained from net profit from net sales and can also measure the ability of the company's management in carrying out its operational activities to minimize the company's burden and maximize company profits. However, different results obtained Purwohandoko (2017) which shows that profitability has a significant positive effect on firm value.

However, in this study the results show that profitability is not so influential on firm value as seen from the results of research that are not significant and have a negative value, because shipping companies have an average profitability that is loss and not stagnant, resulting in a negative profitability value. Brigham and Houston, (2011: 107) state that profitability is the end result of a number of policies and decisions made by companies. Profitability Ratios will show a combination of the effects of Liquidity, asset management, and debt on operating results. Profitability is the ability of a company to get profits in a certain period. Profitability related to profit is one of the reasons that trigger agency conflict. In accordance with Agency theory which assumes that all individuals act in their own interests. Shareholders as owners are assumed to only be interested in financial results in the form of increased dividend distribution. While the manager as an agent is assumed to receive satisfaction in the form of high financial compensation and the conditions that accompany the relationship. With this conflict sometimes the management takes various fraudulent actions such as earnings management, income smoothing and earnings manipulation so that it impacts on stakeholders' distrust of earnings information and in the end they prefer to look for other information that can support whether the company can provide benefits good so that eventually it will have an impact on firm value.

### **The Effect of Liquidity on Firm Value**

In accordance with the hypothesis proposed that Liquidity has a positive and significant effect on Firm value. In table 4.12 it is known that the path coefficient value obtained from the relationship between the variable Liquidity with a firm value of 0.012 with a significance value of 0.003 which is smaller than  $\alpha = 0.05$ . This means that the Liquidity variable has a positive and significant effect on firm value on sea transportation companies that have been listed on the IDX. Each occurrence of an increase in the value of Liquidity using the current ratio (CR), it will affect the increase in firm value. This means that the hypothesis stating that Liquidity has a positive and significant effect on Firm value is proven. This means that the proposed hypothesis is accepted.

These results support research conducted by Gregory Paulus Tahu, (2017), Nadya Marsha, and Isrochmani Murtaqi, (2017), Wulandari (2013) The higher Liquidity shows the greater current assets owned by the company compared to its current liabilities. The concept of pecking order theory states that a company that has high liquidity shows that the company has excess current assets sufficient to fund the company's operations without having to owe, thereby reducing debt in the company's capital structure. So, Liquidity has a positive and significant effect on the value of a company.

Companies that have a high level of liquidity indicate the opportunity to grow the company tends to be high. The more liquid a company is, the higher the level of creditor confidence in lending funds, so as to increase firm value in the eyes of creditors and potential investors (Gultom, et. Al., 2013). A company that is able to meet its financial obligations in a timely manner means that the company is in a liquid state and the company has a means of payment or assets that are greater than its current debt. So, by looking at a company's liquidity the creditor can also assess the merits of a company.

### **The Effect of Capital Structure on Firm Value**

In accordance with the proposed hypothesis that Capital Structure has a positive effect on Firm value. Table 4 shows that the path coefficient value obtained from the relationship between the Capital Structure variable and the firm value is -0.613 with a significance value of 0.033 which is less than  $\alpha = 0.05$ . This means that the Capital Structure variable is negative and significant to the firm value of sea transportation companies listed on the IDX. Every time an Capital Structure value increases using Debt to Equity Ratio (DER), it will reduce the firm value. The hypothesis states that the Capital Structure has a positive effect on firm value, but the results show that Capital Structure has a negative and significant effect on firm value so that the hypothesis proposed is not proven so it is rejected.

The results of this study are in line with the research conducted by Fau (2015) to obtain results that the Capital Structure partially has a negative and significant effect on firm value. While the results of this study contradict the research of Nenggar Bestariningrum, (2015), Gilang Ramadhan Fajri, and Dwi Asih Surjandari, (2016), Ammara Asif, and Dr. Bilal Aziz, (2016), found that Capital Structure has a positive effect on firm value.

### **The Effect of Profitability on Capital Structure**

In accordance with the hypothesis proposed that Profitability has a negative effect on Capital Structure. Table 3 shows that the path coefficient value obtained from the relationship between the profitability variable and the Capital Structure is -0.007 with a significance value of 0.079 which is more than  $\alpha = 0.05$ . This means that the profitability variable is negative and not significant to the Capital Structure of sea transportation companies listed on the IDX. Every increase in

profitability using ROA does not affect the Capital Structure. The hypothesis states that profitability has a negative effect on capital structure but the results show that profitability is negative and not significant to capital structure so that the proposed hypothesis is proven so that the proposed hypothesis is accepted.

The results of this study support the results of research Purwohandoko, (2017), Dharmawan (2015), and Kartika and Dana (2015) Okyana Nur Safitri et. al, (2014) shows that profitability has a significant negative effect on Capital Structure. Profitability is the company's ability to generate profits or profits, thus in line with the Pecking Order Theory which states that: (1) the company likes funding from the company's operating results in the form of retained earnings (internal financing) and (2) if external funding (external financing) is needed, then the company will issue the safest securities first by issuing bonds (Nugrahani and Sampurno, 2012). Thus companies that have high profitability will set aside the profit into retained earnings. With the existence of retained earnings, the company does not need external funding, because the retained earnings are used to finance the company's operational activities. With retained earnings or derived from large capital itself will affect the Capital Structure is small.

### **The Effect of Liquidity on Capital Structure**

In accordance with the hypothesis proposed that Liquidity has a negative effect on Capital Structure. Table 3 shows that the path coefficient value obtained from the relationship between the Liquidity variable and the Capital Structure is 0.003 with a significance value of 0.020. This means that the Liquidity variable has a positive and significant effect on Capital Structure in sea transportation companies that have been listed on the IDX. Each occurrence of an increase in the value of Liquidity using the current ratio (CR), it will affect the increase in the company's Capital Structure. So the hypothesis which states that Liquidity has a negative and significant effect on Capital Structure is not proven. This means that the proposed hypothesis is rejected.

The results of this study support the study of Nantyo (2014) stating that liquidity has a positive effect on Capital Structure. This happens because companies that already benefit from more liquid equity will be more motivated to use more of their own capital than to use long-term debt. Companies with high or short liquidity do not affect the Capital Structure because the company seeks to produce high liquidity but is not affected by increasing financing to meet working capital and investment. While the Thaib and Dewantoro research (2017) explains that Liquidity has a positive and not significant effect on Capital Structure. This means that a company's liquidity has no influence on capital structure. Basically Liquidity is the company's ability to meet its short-term obligations which of course can increase firm value because of the low debt value but high liquidity value also shows that many of the company's funds are unemployed which ultimately reduces the company's profitability. And this is what can improve Capital Structure so that creditors are also more interested in giving credit to the company. In this result it is said that Liquidity does not significantly affect the capital structure seen from the results of research that are not significant. According to the Pecking Order Theory, companies that have high liquidity will tend not to use debt financing. This is due to companies with high liquidity levels that have large internal funds, so that the company will use its internal funds first to finance its investment before using external financing through debt.

### **The Effect of Capital Structure Mediating Profitability on Firm Value**

In accordance with the hypothesis proposed that profitability has a direct and significant influence on firm value when mediated by Capital Structure. The results show that the Z value obtained from the relationship between the Profitability variable to the firm value mediated by Capital Structure is 0.795 < 1.96 (absolute Z value) so that it shows no indirect and insignificant influence on the profitability of the firm value mediated by Capital Structure. The hypothesis states that Profitability has a direct and significant influence on Firm value when mediated by Capital Structure but the results show Profitability has no effect so the proposed hypothesis is not proven so the proposed hypothesis is rejected.

The results of this study do not support the results of Thaib and Dewantoro (2017) research, explaining that Profitability has an insignificant direct effect on Firm value but when mediated by Capital Structure has a significant direct effect on Firm value on public sea transport companies. This is in line with Wijaya's research (2014) which explains that based on Pecking Order Theory to obtain internal funds, companies with high profitability can use internal funds first before using debt to meet corporate funding decisions. However, the results of the study show that profitability is not so influential on firm value even though it has been mediated by Capital Structure as seen from the insignificant research results. This is because shipping companies have an average profit loss while the average firm value has a stagnant value resulting in a negative profit value.

### The Effect of Capital Structure Mediating Liquidity on Firm Value

In accordance with the hypothesis proposed that Liquidity has a direct and insignificant influence on Firm value when mediated by Capital Structure. The results show that the Z value obtained from the relationship between the Liquidity variable and the firm value mediated by Capital Structure is  $0.795 < 1.96$  (absolute Z value) so that it shows that there is no indirect and insignificant effect of Liquidity on the firm value mediated by Capital Structure. The hypothesis states that Liquidity has a direct and insignificant influence on Firm value when mediated by Capital Structure, however, the results show that Liquidity has no effect so the proposed hypothesis is not proven so that the proposed hypothesis is rejected.

The results of the Thaib and Dewantoro (2017) study explained that Liquidity had an insignificant direct effect on Firm value but when mediated by Capital Structure had a non-significant direct effect on Firm value on public sea transportation companies. This is not in line with Nantyo (2014) and Dwi Retno Wulandari (2013) describing the Company in running a business and its business requires funds, funds obtained from company owners and debt. Funds received by the company are used to purchase fixed assets in producing goods and services, purchase materials for production and sales, issue trade receivables and hold cash inventories and buy securities which are often called securities or securities both for transactions and to maintain Company Liquidity.

## V. CONCLUSIONS AND SUGGESTIONS

Based on the results of the analysis and discussion in the previous chapter, it can be concluded as follows:

- 1) The results show that the path coefficient value obtained from the relationship between the profitability variable and the firm value is  $-0.001$  with a significance value of  $0.909$  which is more than  $\alpha = 0.05$ . This means that the profitability variable is negative and not significant to the firm value of sea transportation companies listed on the IDX.
- 2) The results show that the path coefficient value obtained from the relationship between the Liquidity variable and the firm value is  $0.012$  with a significance value of  $0.003$ . This means that this means that the Liquidity variable has a positive and significant effect on firm value on sea transportation companies that have been listed on the IDX. Each occurrence of an increase in the value of Liquidity using the current ratio (CR), it will affect the increase in firm value.
- 3) The results show that the path coefficient value obtained from the relationship between the Capital Structure variable and the firm value of  $-0.613$  with a significance value of  $0.033$  which is less than  $\alpha = 0.05$ . This means that the Capital Structure variable is negative and significant to the firm value of sea transportation companies listed on the IDX.
- 4) The results show that the path coefficient value obtained from the relationship between the Profitability variable and the Capital Structure is  $-0.007$  with a significance value of  $0.079$  which is more than  $\alpha = 0.05$ . This means that the profitability variable is negative and not significant to the Capital Structure of sea transportation companies listed on the IDX.
- 5) The results show that the path coefficient value obtained from the relationship between the Liquidity variable and the Capital Structure is  $0.003$  with a significance value of  $0.020$ . This means that this means that the Liquidity variable has a positive and significant effect on Capital Structure in sea transportation companies that have been listed on the IDX.
- 6) The results show that the Z value obtained from the relationship between the Profitability variable and the firm value mediated by Capital Structure is  $0.795 < 1.96$  (absolute Z value) so that it shows no indirect and insignificant influence on the profitability of the firm value which is mediated by Capital Structure.
- 7) The results show that the Z value obtained from the relationship between the Liquidity variable and the firm value mediated by Capital Structure is  $0.795 < 1.96$  (absolute Z value) so that it shows no indirect and insignificant influence of Liquidity on the firm value which is mediated by Capital Structure.

Suggestions that can be given based on the results of the study are as follows:

- 1) For company management, it is expected to pay more attention to the influence of Profitability, Liquidity, and Capital Structure in order to evaluate these factors to be considered in increasing firm value because investors will be more intent on investing in companies with high firm values.
- 2) For further research, it is advisable to expand the research. The expansion of the research in question is to add or replace a number of variables that are likely to influence firm value as well as expand the scope of research, not only to companies in the sea transportation sector but also to companies engaged in other sectors listed on the Indonesia Stock Exchange.

## REFERENCES

- [1] Addae, Albert Amponsah, Michael Nyarko-Baasi & Daniel Hughes. (2013). The Effects of Capital Structure on Profitability of Listed Firms in Ghana. *European Journal of Business and Management*. 5(31), 215-229.
- [2] Arif. (2015). Pengaruh Struktur Modal, Return On Equity, Likuiditas, Dan Growth Opportunity Terhadap Nilai Perusahaan Pada Perusahaan Jasa Yang Terdaftar Di Bursa Efek Indonesia. *Skripsi*. Universitas Negeri Yogyakarta.
- [3] Asif, Ammara., dan Aziz, Dr. Bilal. (2016). Impact of Capital Structure on Firm Value Creation-Evidence from the Cement Sector of Pakistan. *International Journal of Research in Finance and Marketing (Impact Factor – 5.861)*. 6(6), June 2016.
- [4] Bestariningrum, dan Nenggar. (2015). Analyzing The Effect Of Capital Structure and Firm Size on Firm Value (Case Study: Company That Listed In Lq-45 Index Period 2010-2014). *Jurnal Berkala Ilmiah Efisiensi. International Business Administration (IBA) Program, Management Department, Faculty of Economic and Business, University of Sam Ratulangi, Manado 95115, Indonesia*. 15(04), 2015.
- [5] Brealey, Myers, Marcus. (2008). *Dasar – Dasar Manajemen Keuangan*. Edisi 5. Jilid 1. Jakarta: Erlangga.
- [6] Brigham, E.F., Ehrhardt, Michael C., (2013), *Financial Management Theory and Practice* (edisi ke 13), Cengage Learning, USA South Western.
- [7] Brigham, Eugene F & Houston, Joel F. (2011). *Dasar-dasar Manajemen Keuangan, (Alih Bahasa: Ali Akbar Yulianto)* Edisi 10. Jakarta: Salemba Empat.
- [8] Chen, Shun-Yu dan Li-Ju Chen. (2011). The influence of profitability on firm value with capital structure as the mediator and firm size and industry as moderators. *Investment Management and Financial Innovations*. 8(3), 2011.
- [9] Damayanti, Dwi.(2016). Pengaruh Struktur Modal, Profitabilitas, Ukuran Perusahaan dan Kebijakan Deviden terhadap Nilai Perusahaan, Studi Empiris Pada Perusahaan Manufaktur yang terdaftar di Bursa Efek Indonesia tahun 2012–2014, Diss. Universitas Muhammadiyah Surakarta.
- [10] Dharmwan, Febriansyah, (2015), “Analisis Pengaruh Profitabilitas, Size Dan Sales Growth Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Intervening (Analisis Data Panel pada Perusahaan Pertambangan yang terdaftar di BEI tahun 2010-2013)”. Masters thesis, Diponegoro University
- [11] Ernawati dan Widayawati (2016). Pengaruh Profitabilitas, *Leverage* dan Ukuran Perusahaan Terhadap Nilai Perusahaan. *Jurnal Ilmu & Riset Akuntansi*. 4(4).
- [12] Fajri, dkk. (2016). The Influence Of Profitability Ratios, Capital Structure And Shareholding Structure Against On Value Company (Empirical Study Of Coal Mining Companies Listed On The Stock Exchange Of Indonesia Year 2011-2013). *The Accounting Journal of Binaniaga*. 1(2), 2016.
- [13] Fau, Nia Rositawati. (2015). Diajukan Kepada Fakultas Ekonomi Universitas Negeri Yogyakarta untuk Memenuhi Sebagian Persyaratan guna Memperoleh Gelar Sarjana Ekonomi. *Naskah Publikasi*. Fakultas Ekonomi Universitas Negeri Yogyakarta.
- [14] Gultom, Robinot. Dkk. (2013). Analisis Faktor-Faktor Yang Mempengaruhi Nilai Perusahaan Pada Perusahaan Farmasi Di Bursa Efek Indonesia. *Jurnal Wira Ekonomi Mikroskil*. 3(1).
- [15] Handayani, R., & Seftianne. (2011). Faktor-Faktor Yang Mempengaruhi Struktur Modal Pada Perusahaan Publik Sektor Manufaktur. *Jurnal Bisnis dan Akuntansi*. 13(1), 39-56.
- [16] Hidayat, Nurul. (2018). Saham Emiten Pelayaran Bisa Jadi Pilihan. <https://market.bisnis.com/read/20180104/189/723219/saham-emiten-pelayaran-bisa-jadi-pilihan>. Diunduh pada tanggal 13 Februari 2019.
- [17] Jantana, Indra. (2012). Pengaruh Struktur Modal, Profitabilitas, dan Likuiditas terhadap Nilai Perusahaan pada Perusahaan Sektor Barang Konsumsi Sub-Sektor Rokok di BEI tahun 2007-2011.
- [18] Kartika, I Komang Suarnata., dan Made Dana. (2015). Analisis Pengaruh Profitabilitas, Likuiditas, Ukuran Perusahaan, dan Tingkat Pertumbuhan Terhadap Struktur Modal Perusahaan Food And Beverage yang terdaftar di BEI. *E-Jurnal Manajemen Universitas Udayana*, 4(3), hal: 606-625.

- [19] Kusuma, Indra Gunawan dkk (2012) Analisis Pengaruh Profitabilitas (*Profitability*) Dan Tingkat Pertumbuhan (*Growth*) Terhadap Struktur Modal Dan Nilai Perusahaan (*Studi pada Perusahaan Real Estate and Property yang Terdaftar di Bursa Efek Indonesia (BEI) Periode 2007-2011*).
- [20] Makkulau, A.R., Fakhry A. dan Abdul H. (2018). Pengaruh Struktur Modal terhadap Nilai Perusahaan dengan Profitabilitas sebagai Variabel Intervening pada Perusahaan Properti dan Real Estate yang terdaftar di Bursa Efek Indonesia. *Journal of Economic and Business*. 1(2), 67-74.
- [21] Manu, Ronni, dan Malelak. (2014). Pengaruh Struktur Modal Terhadap Nilai Perusahaan pada Sektor Utama yang terdaftar di BEI.
- [22] Marchyta, Nony Kezia dan Dewi Astuti. (2015). Pengaruh Struktur Modal dan Karakteristik Perusahaan Terhadap Profitabilitas dan Nilai Perusahaan. *Finesta* 3(1), 2015, 13-18.
- [23] Marsha, dkk. (2017). The Effect Of Financial Ratios On Firm Value In The Food And Beverage Sector of the IDX. *Journal Of Business And Management. School of Business and Management Institut Teknologi Bandung, Indonesia*. 6(2), 2017: 214-226.
- [24] Meythi, Riki Martusa dan Debbianita. (2012). Pengaruh Struktur Modal Terhadap Nilai Perusahaan dengan Pertumbuhan Perusahaan Sebagai Variabel Moderating. Tesis. Universitas Kristen Maranatha. Bandung.
- [25] Nantyo Krsitian dan Khuzaini (2014). Pengaruh Likuiditas dan Profitabilitas Terhadap Struktur Modal Dan Rasio Aktivitas Sebagai Intervening. *Jurnal Ilmu & Riset Manajemen*. 3 (13).
- [26] Nugrahani, Sarsa Meta dan R. Djoko Sampurno. (2012). Analisis Pengaruh Profitabilitas, Likuiditas, Pertumbuhan Penjualan, Ukuran Perusahaan dan Kepemilikan Manajerial Terhadap Struktur Modal. *Diponegoro Business Review*. 1(1).
- [27] Nur Safitri, Okyana, dkk. (2014). "The Influence of Capital Structure and Profitability on Firm Value " retail companies listed in Indonesia Stock Exchange from 2010 until 2013.
- [28] Paulus Tahu, Gregorius. (2017). Effect of Liquidity, Leverage and profitability to The Firm Value (Dividend Policy as Moderating Variable) in Manufacturing Company of Indonesia Stock Exchange. *Research Journal of Finance and Accounting*. 8(18), 2222-2847.
- [29] Prasetyorini, B. F. (2013). Pengaruh Ukuran Perusahaan, Leverage, Price Earning Ratio Dan Profitabilitas Terhadap Nilai Perusahaan. *Jurnal Ilmu Manajemen*, 1(1), 183-196.
- [30] Pratama dan Wirawati. (2016). "Pengaruh Struktur Modal dan Profitabilitas terhadap Nilai Perusahaan dengan Kepemilikan Manajerial Sebagai Pemoderasi". ISSN:2302---8556 E-Jurnal Akuntansi Universitas Udayana Vol.15.3. Juni (2016): 1796-1825.
- [31] Purwohandoko. ( 2017). The Influence of Firm's Size, Growth, and Profitability on Firm Value with Capital Structure as the Mediator: A Study on the Agricultural Firms Listed in the Indonesian Stock Exchange. *International Journal of Economics and Finance*. 9, No. 8; 2017.
- [32] Rina Bukit. (2012). Pengaruh Struktur Modal Terhadap Nilai Perusahaan Melalui Profitabilitas (Analisis Data Panel Perusahaan Manufaktur di BEI).
- [33] Roy. (2018). Kuartal I-2018 Transportasi Tumbuh 8,59%, Ini Kata Menhub. <https://www.cnbcindonesia.com/news/20180507183636-4-14015/kuartal-i-2018-transportasi-tumbuh-859-ini-kata-menhub>. Diunduh pada tanggal 13 Februari 2019
- [34] Safitri, dkk. (2014). The Influence Of Capital Structure And Profitability On Firm Value (A Study in Retail Companies Listed in Indonesia Stock Exchange 2010-2013 period). *Jurnal Administrasi Bisnis (JAB). Faculty of Administrative Science Brawijaya University*. 13(2), Agustus 2014.
- [35] Sampurno, Djoko dan Guna, Adi, Michael. (2018). Analisis Faktor-Faktor yang Mempengaruhi Struktur Modal pada Perusahaan Makanan dan Minuman yang terdaftar di BEI (2012-2016). *Diponegoro Journal Of Management*, Volume 7, No.2.

- [36] Sari, Putu Indah Purnama dan Abundanti, Nyoman. (2014). "Pengaruh Pertumbuhan Perusahaan Dan Leverage Terhadap Profitabilitas Dan Nilai Perusahaan". *E-Journal Universitas Udayana*. 3(5), Denpasar:
- [37] Suksmana, Lilla Yuniar, dan Ubud Salim. (2015). "Pengaruh Profitabilitas, Struktur Modal Dan Ukuran Perusahaan Terhadap Nilai Perusahaan (Studi Pada perusahaan LQ-45 yang Listing Di Bursa Efek Indonesia Periode 2012–2014)", *Jurnal Ilmiah Mahasiswa FEB* 3.2.
- [38] Thaib, dan Dewantoro. (2017). Pengaruh Profitabilitas dan Likuiditas Terhadap Nilai Perusahaan dengan Struktur Modal sebagai Variabel *Intervening*. *Jurnal Riset Perbankan Manajemen dan Akuntansi*. Universitas Udayana.
- [39] Wijaya, M. Sienly Veronica, dan Bram Hadianto. (2014). Pengaruh Struktur Aktiva, Ukuran, Likuiditas, dan Profitabilitas terhadap Struktur Modal Emiten Sektor Ritel di Bursa Efek Indonesia: Sebuah Pengujian Hipotesis Pecking Order. *Jurnal Ilmiah Akuntansi*, Vol. 7, No. 1, Mei 2008.
- [40] Wulandari, Dwi Retno. (2013). Pengaruh Profitabilitas, *Operating Leverage*, Likuiditas Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai *Intervening*. *Accounting Analysis Journal*. Jurusan Akuntansi, Fakultas Ekonomi, Universitas Negeri Semarang: Indonesia.