

# THE INFLUENCE OF LIQUIDITY AND ASSET STRUCTURE TO PROFITABILITY MEDIATED CAPITAL STRUCTURE.

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## ABSTRACT

This study aims to analyze the effect of liquidity and asset structure on corporate profitability with the role of capital structure as a mediator. The population in this study are tourism sub-sectors, hotels and restaurant listed on the Indonesia stock Exchange. The sampling technique used purposive sampling technique, the criteria determined were tourism sub-sector companies, hotel, and restaurant that publish complete financial statements during the period 2012-2016. Financial report data is obtained from the Indonesia stock Exchange website. Data analysis method is multiple linear regression analysis. Hypothesis testing using t-test, F-test, Sobel test. The results show that liquidity and asset structure directly affect Profitability. Capital structure cannot mediate the effect of liquidity and asset structure on Profitability.

**Keyword:** Liquidity, Asset structure, Capital structure, Profitability.

## INTRODUCTION

The company's goal is to achieve maximum profit so that it can prosper the shareholders and increase the value of the company. Company goals can be realized if operational activities run optimally. The company's operational activities require substantial funds. To meet funding needs can be done with internal and external funding. Internal funding sources, namely sources of funds that are formed or generated by themselves within the company, for example funds derived from unspent profit or profit held in the company. In addition to internal funding sources, other sources of funds are external sources, namely sources of funds derived from additional equity ownership or issuance of new shares, sale of bonds, credit and banks. One of the problems of funding policy in companies is the problem of capital structure. The capital structure is the ratio or balance of the company's long-term funding which is shown by the comparison of long-term debt to equity (Fahmi, 2013). The capital structure indicates how the company finances its assets. Companies need funds from their own capital and foreign capital. The capital structure is a permanent financing of a company that reflects a comparison between long-term debt and own capital. In determining the funding sources used, the company analyses the optimal combination of capital structures. The company considers the optimal level of profit as the impact of the

proportion of funding sources. Companies must be able to raise funds both from within and outside the company efficiently, therefore there needs to be an optimal balance between the two sources of funds. One of the important decision faced by the company in relation to company operations is the decision on capital structure, which is a description of the form of the company's financial proportions between capital owned by long-term liabilities and shareholder equity. Become a source of financing for a company (Sartono, 2013). The application of the company's capital structure needs to consider various variables that influence it. Liquidity is one of the determinants of capital structure. Liquidity is the ability of a company to pay short-term liabilities or debts that are due immediately when billed as a whole. In other words, how much current assets are available to cover short-term liabilities that are due (Weygandt, Jerry J., Paul D. Kimmel, 2012). Eriotis, Vasillios & Neokosmidi (2017) research shows that liquidity has a negative effect on the capital structure. While Gomez, Rivas & Bolanos (2014) show that liquidity does not affect the capital structure. The asset structure in this study is measured by comparing between fixed assets and total assets. According to Sartono (2013) companies that have large amounts of fixed assets can use debt in large amounts because this is because the scale of large companies will more easily get access to funding sources compared to small companies. Then the amount of fixed assets can be used as collateral or corporate debt collateral. Gomez, et al (2014) show that the structure of assets (tangibility) has a positive effect on the capital structure. Whereas Benkraiem & Gurau (2013) found that the structure of assets (tangibility) negatively affects the capital structure. Capital structure is an important matter to be considered and analysed because the capital structure can describe the long-term risks borne by the company as long as the company operates. The right funding decision can be one of the efficiency factors of the company so that it can have an impact on increasing the company's profit. The decision of an efficient capital structure will improve the company's performance. Chisti Research, (2017). Shows that capital structure influences profitability. Based on the inconsistent phenomena and research results above, the factors that can influence the company's funding its impact on the company's profitability need to be further investigated.

## **LITERATURE REVIEW**

### **THEORY OF CAPITAL STRUCTURE : The Trade-Off dan Pecking Order Theories**

The relationship between the decision of capital structure and the value of the company's has been widely studied in the past few decades. Over the years, alternative capital structure theories have been developed to determine the factors that influence capital structure decision . Modigliani and Miller are a milestone in the study of capital structure. Modigliani and Miller stated that. "*contradicted the assumptions of the traditional theory presented by Durand, who advocated the existence of an optimal capital structure that maximizes company value. This research resulted in the presentation of two propositions that are pervasive in finance theory. The first proposition states that the value of a company is independent of its capital structure. The second proposition states that the return given by the company to its shareholders is independent of its debt. These propositions are based on the assumption of the efficiency of capital markets and the absence of taxes*" ( Zani, Leites, Macagnan, Portal, 2014).

The tax advantages of debt motivate optimal capital structure theory, which implies that companies can achieve an optimal capital structure and increase firm value by changing their capital structure. Go broke and financial difficulties are basic. *Trade-Off Theories*. *Trade-Off Theories* confirms that the company sets a debt target to assess the ratio and gradually moves in that direction. According to this theory, any increase in the level of debt causes an increase in go broke, financial pressure and agency costs, and therefore decreases the value of the company. Thus, an optimal capital structure can be achieved by establishing a balance between profit ( tax benefits) and losses ( financial difficulties and go broke costs) on debt. To establish this balance companies must look for debt levels where the costs of financial difficulties might offset the tax benefits of increased debt.(Chen, Jiang, Lin, 2014; Karadeniz, Kandir, Balcilar, Onal, 2009).

Alternatif *Trade-Off Theories* adalah *Pecking Order Theories* assume that there is information asymmetry between investors. (Myers dalam Gómez dkk., 2014). Investors generally have less information than insiders, ordinary shares will be underestimated by the market. Moreover ,the company does not have a target capital structure. *Pecking Order Theories* states that companies prefer internal external financing and debt to equity, if they issue securities. When companies use external funds, they prefer to issue yhe safest security

namely debt, convertible securities, and equity as a last resort. They use external funds only if their internal funds are insufficient. *Trade-Off Theories* underline taxes, temporarily *Pecking Order Theories* emphasize asymmetric information. (Ahmed Sheikh & Wang, 2011; Dawar, 2014).

## **THEORITICAL FRAMEWORK AND HYPOTHESIS.**

### **1. Influence of Liquidity to capital structure and profitability.**

Liquidity indicates the company's ability to pay short-term financial obligations on time. The company's liquidity is indicated by the size of the current assets, namely assets that are easy to convert into cash. Current assets that include cash, securities, receivables, inventories. A full liquidity analysis requires the use of the cash budget, but by connecting cash and other current assets with current liabilities, ratio analysis provides a measure of liquidity that is fast and easy to use. (Brigham, 2011). *Current ratio* as one way to measure company liquidity. "The current ratio is a widely used measure for evaluating a company's liquidity and short-term debt-paying ability. The ratio is computed by dividing current assets by current liabilities" (Weygandt, dkk., 2012). In other words, this ratio illustrates how much the availability of current assets owned by the company compared to the total liabilities (debt) smooth the current ratio is calculated as the result of the division between total current assets and total liabilities (debt) smoothly. *Pecking Order Theory* stated that companies would prefer to use funding from internal companies. companies that have a high current ratio will reduce financing through debt. This is because companies already have high internal source funding through liquid assets, so the higher the level of company's current ratio will reduce the use of external funds. This is in accordance with previous research which shows that liquidity is negatively correlated with capital structure. (Šarlija & Harc, 2012; Eriotis dkk., 2007).

H1 : Liquidity has a negative effect on the capital structure.

H2 : Liquidity have a negative effect on profitability.

### **2. Influence of activa structure to capital structure and profitability.**

Astated earlier that asset structure is one of the important variables in determining funding decisions, because the fixed assets owned by a company can be used as *collateral* for the creditor in making loans. structure Assets which are a comparison

between fixed assets and total assets will greatly affect the company's capital structure. Capital structure which is a comparison between long-term debt and own capital used by the company. While the capital itself can be said to be a company asset. The larger the asset structure owned by the company, the greater the loan that can be obtained by the company on the guarantee given to the creditor. So that it will affect the value of the capital structure as well. This is consistent with the result of previous studies that asset structure has a positive effect on capital structure. (Gomez dkk. 2014).

H3 : Asset structure has a positive effect on capital structure.

H4 : Asset structure has a positive effect on profitability

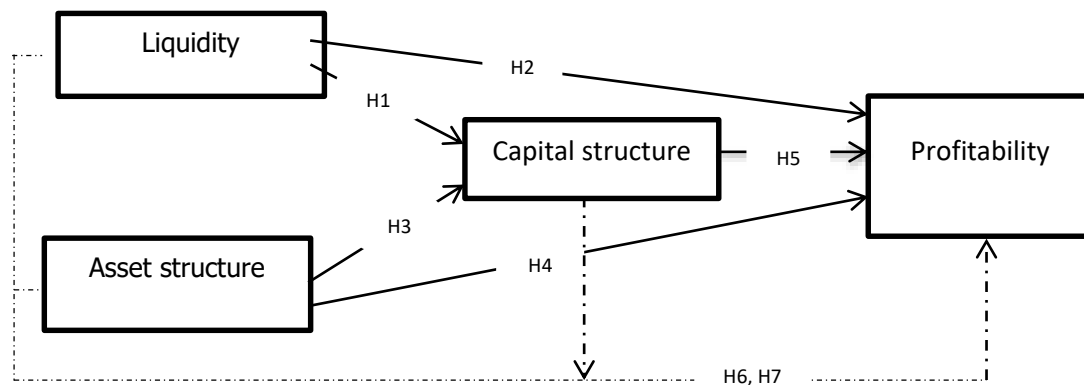
### **3. Influence of capital structure to profitability and the role capital structure into mediated liquidity influence and activa structure to profitaility.**

Capital structure and profitability have a relationship that cannot be ignored, where both have relationship that influence each other This is because companies need to increase provitability in order to survive long-trem and later affect the value of the company. Among other things about the size of the value issued by the company for the social and environmental needs of the company, the payment of debt interest is tax deductible, and the addition of debt in the capital structure will increase the provitability of the company. Previous research conducted by Gill, Biger and Mathur (2011) found that the relationship of capital structure has a positive effect on profitability. Based on the description, the hypothesis submitted as follows:

H5 : Capital structure has a positive effect on profitability.

H6 : Capital structure can increase the influence of liquidity on profitability.

H7 : Capital structure can increase the effect of asset structure on profitability.



**Figure 1 : Research Framework**

## RESEARCH METHODOLOGY

This study uses multiple regression analysis tools. Research data in the form of secondary data namely financial report published on the official website of the stock Exchange, Bursa Efek Indonesia ([www.idx.co.id](http://www.idx.co.id)) and [www.sahamok.com](http://www.sahamok.com). The population in this study are tourism sub-sectors, and restaurant listed on the Indonesia stock Exchange (IDX). The tourism, hotel and restaurant sub-sector companies are interesting to study because currently experiencing rapid growth in the country of Indonesia. Since President Joko Widodo set tourism as a leading sector of national development, Indonesia's tourism world has become one of the largest and fastest growing economic sectors. ([www.sindonews.com](http://www.sindonews.com)).

The sampling technique used in this study is nonprobability sampling which is purposive sampling, with criteria for tourism, hotel and restaurant sub-sector companies that publish complete financial statements have been audited, and published during the 2012-2016 period. Based on these criteria, a sample of this study were 19 tourism, hotel and restaurant sub-sectors listed on the Indonesia stock exchange.

The variables used in this study consist of independent variables namely liquidity variables proxied in the current ratio. Current ratio is measured by the formula of current debt (Weygandt et al, 2012) and asset structure variables as measured by the formula of fixed assets divided by total assets (Riyanto, 2010). The dependent variable is profitability proxied in return on assets. (Stice et al 2004) The mediation variable is the capital structure which is measured by long-term debt formula divided by total equity (Sartono, 2013).

## FINDINGS AND DISCUSSION

Table 1 Shows the capital structure variable has an average value -0,34278, standar deviation 0,839426. Profitability has an average -2,14634, standard deviation1,544559. Assets structure has an average -0,32630, standard deviation 0,04566. Sales growth has averaged -1,06782, standard deviation 1,079277. Research data 65.

**Table 1. Descriptive Analysis Analisis**

Variabel	Mean	Standard Deviation	N
Capital structure	0,4577	0,51432	95
Profitability	0,0408	0,07286	95
Liquidity	1,6414	0,92645	95
Asset structure	0,4404	0,25150	95

Sources : *Output SPSS 22,0*

Data testing shows that the data in this study fulfils the classic assumption that residual data is normally distributed in the absence multikolinieritas, autokorelasi, and heteroskedastisitas. Thus the data is suitable for use in a liner regression .

**Table 2. Result of regression analysis.**

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
<b>Regresi 1. Variabel dependen : Capital Structure</b>				
Liquidity	-0,123	0,058	-2.106	0.038
Asset structure	0.258	0,215	1,199	0.234
<b>Regresi 2. Variabel dependen : Profitability</b>				
Liquidity	0,037	0,007	5,234	0,000
Asset structure	-0,056	0,026	-2,142	0,035
<b>Regresi 3. Variabel dependen : Profitability</b>				
Capital structure	-0.030	0,014	-2,102	0,038

Sources : Processed SPSS 22

Based on table 2 it can be interpreted as follows:

### **The Influence Liquidity To Capital Structure.**

Liquidity variables have sig 0,038 ( $0,038 < 0,05$ ) Which means significant effect, so it can be said that  $H_0$  is rejected and  $H_1$  is accepted. This means that the increase in liquidity has a significant effect on the capital structure . variable liquidity regression coefficient of -0. 123 means that if the structure of fixed asstes while liquidity has increased 1 unit then the capital structure will decrease by 0.123 units ,and vice versa ,if liquidity has a decrease of 1 unit,thenthe capital by0.123unit.This liquidity ratio illustratres the amount of available current assets owned by The company is compared to the total liability ( debt) smoothness. The current ratio is calculated as the result of the division between total current assets and

total liabilities (debt) smoothly. Pecking order Theory states that companies will prefer to use funding from internal companies. Companies that have a high current ratio will reduce financing through debt. This is because companies already have high internal source funding through liquid assets, so the higher the level of a company's current ratio will reduce the use of external funds. The results of this study are in accordance with previous research which shows that liquidity is negatively correlated with capital structure. (Šarlija & Hara, 2012; Eriotis dkk., 2007).

### **Influence of Liquidity to Profitability.**

Variables liquidity have sig 0,000 ( $0,000 < 0,10$ ) Which means significant effect, so it can be said that  $H_0$  is rejected and  $H_2$  is accepted. This means that increasing liquidity has a significant effect on profitability. Variable regression coefficient of liquidity of 0.037 means that if the structure of fixed assets while liquidity has increased 1 unit then profitability will increase by 0.037 unit, and vice versa, if liquidity has a decrease of 1 unit, then profitability will decrease by 0.037 units. Companies that have a high level of liquidity will be able to meet current liability on time. The company's is increasingly optimal in running its business operations. Companies can reduce the cost of interest on the current debt and increase profits.

### **Influence Of Activa Structure To Capital Structure.**

Asset structure variables have sig 0,234 ( $0,234 > 0,05$ ) Which means there is no significant effect, so it can be stated that  $H_0$  is accepted and  $H_3$  is rejected. This means that changes in asset structure do not significantly influence the capital structure. Regression coefficient asset structure variable is 0.258 meaning that if value is fixed while the asset structure has increased by 1 unit, then the capital structure will increase by 0.258 units, and vice versa, if the asset structure decreases by 1 unit, then the capital structure will decrease by 0.258 units. This shows that the greater the proportion of the company's fixed assets, the higher the opportunity for companies to obtain funding from long-term debt. So that with the increasing proportion of fixed assets, it will increase the company's capital structure. The result of this study are in line with the result of previous studies that asset structure has a positive effect on capital structure. (Gomez dkk. 2014).

### **Influence activa structure to profitability.**



Asset structure variables have sig 0,035 ( $0,035 < 0,05$ ) Which means significant effect, so it can be stated that  $H_0$  is rejected and  $H_4$  is accepted. This means that changes in asset structure have a significant effect on profitability. Regression coefficient asset structure variable of -0.056 means that if the liquidity is fixed value while the asset structure has increased 1 unit, then profitability will increase by 0.056 units. Companies that have a high level of fixed assets require large sources of funds so that capital costs increase. Increased capital costs will have an impact on decreasing profitability.

### **Influence Capital Structure To Profitability.**

Capital structure variables have sig 0,038 ( $0,038 < 0,05$ ) Which means a significant effect, so it can be said that  $H_0$  is rejected and  $H_5$  is accepted. This means that the increase in capital structure has a significant effect on profitability. The regression coefficient of capital structure variable is 0.030 which means that if the capital structure has an increase of 1 unit then profitability will increase by -0.030 and vice versa. If the capital structure has decreased by unit then profitability will decrease by 0.030 units. Companies need to increase profitability in order to survive long-term and later affect the value of the company. That meets its funding needs originates from long-term debt can have an impact on increasing interest costs. If a company is unable to manage debt productively, it will result in a decrease in profitability. The result of this study are not consistent with the research conducted by Gill, Bigger, & Mathur (2011) that are relationship of capital structure has a positive effect on profitability.

### **The Role Of Capital Structure Onto Mediated Liquidity Influence To Profitability.**

From the results of the calculation, the test gets the t as big as 1,430680978. T tabel with a level of significance 0,1 dan  $df = 93$  sebesar 1,98. Value z obtained by  $1,430680978 < 1,98$  then prove that the capital structure is not able to mediate the influence of liquidity on profitability. The ability of a company to meet current liabilities by utilizing current assets can directly impact profitability.

### **The role capital structure on to mediated asset structure influence to profitability.**

From the results of the calculation, the test gets the value t sebesar 0,969706. T tabel with a level of significance 0,05 dan  $df = 93$  Value 1,98. Value t what is permitted a

0,969706<1,98 then prove that the capital structure is not able to mediate the influence of asset structure on profitability. The results show that asset structure can directly affect profitability. Sources of funds for the procurement of assets originating from debt or equity do not have an impact on the acquisition of company profits.

## CONCLUSION

Based on the results of the study obtained conclusions as follows, liquidity and capital structure directly affect profitability. Liquidity directly affect the capital structure. The structure of assets does not directly affect the capital structure. Capital structure cannot mediate the effect of liquidity and asset structure on profitability.

This research is expected to be useful as material for consideration and reference for the management of the company in determining the policy of asset spending for companies, especially in the tourism, hotel and restaurant sub-sectors because of the good and bad results for decision making in making the right investment and can be profitable.

Limitations in this study include independent variables studied only on liquidity and asset structure capital structure variables as mediating variables are proxied. In *long term debt ratio*. Companies that are subject to research are limited to tourism, hotel and restaurant sub-sector companies with observation periods from 2012-2016.

For the next researcher taking the same topic is suggested to add other independent variable such as sales growth so that research can provide even better results. Capital structure variables should be proxied inside. *Short Term Debt Ratio* dan *Total Debt Ratio* other than *Long Term Debt Ratio*. Research subjects are more extended to other sub-sectors and add to the research period so that the data and research results are more.

## REFERENCES

- Ahmed Sheikh, N., & Wang, Z. (2011). Determinants of capital structure. *Managerial Finance*, 37(2), 117–133.
- Benkraiem, R., & Gurau, C. (2013). How do corporate characteristics affect capital structure decisions of French SMEs? *International Journal of Entrepreneurial Behavior & Research*, 19(2), 149–164.
- Brigham, Eugene F. dan Joel F. Houston. (2011). *Essentials of Financial Management: Dasar-Dasar Manajemen Keuangan*. Penerjemah Ali Akbar Yulianto. Edisi Kesebelas. Edisi Indonesia. Buku I. Jakarta : Salemba Empat.

- Chen, J., Jiang, C., & Lin, Y. (2014). What determine firms' capital structure in China? *Managerial Finance*, 40(10), 1024–1039.
- Chisti, Khalid Ashraf. Khursheed Ali dan Mouh-i-Din Sangmi. (2017). Impact of Capital Structure on Profitability of Listed Companies (Evidence from India). *The USV Annals of Economics and Public Administration* Volume 13, Issue 1(17).
- Dawar, V. (2014). Agency theory, capital structure and firm performance: some Indian evidence. *Managerial Finance*, 40(12), 1190–1206.
- Eriotis, N., Vasiliou, D., & Ventoura-Neokosmidi, Z. (2017). How firm characteristics affect capital structure: an empirical study. *Managerial Finance*, 33(5), 321–331.
- Fahmi, Irham. (2013). *Pengantar Manajemen Keuangan Teori dan Soal Jawab*. Cetakan ke-5. Bandung : Alfabeta.
- Gill, Amarjit, Nahum Biger, Neil Mathur. (2011). The effect of capital structure on profitability: Evidence from the United States. *International Journal of Management*, Vol. 28, No. 4, Part 1, pp. 3-15.
- Gómez, G., Mena Rivas, A., & Lizarzaburu Bolaños, E. R. (2014). The determinants of capital structure in Peru. *Academia Revista Latinoamericana de Administración*, 27(3), 341–354.
- Karadeniz, E., Yilmaz Kandir, S., Balcilar, M., & Beyazit Onal, Y. (2009). Determinants of capital structure: evidence from Turkish lodging companies. *International Journal of Contemporary Hospitality Management*, 21(5), 594–609.
- Riyanto, Bambang. (2010). *Dasar-Dasar Pembelanjaan Perusahaan*, Edisi 4, Cet.10. Yogyakarta. Fakultas Ekonomi dan Bisnis UGM.
- Šarlija, N., & Harc, M. (2012). The impact of liquidity on the capital structure: a case study of Croatian firms. *Business Systems Research*, 3(1), 30–36.
- Sartono, Agus. (2013). *Manajemen Keuangan Teori dan Aplikasi*. Edisi 4. Cetakan ke-4. Yogyakarta : Media Komputindo.
- Stice, Stice James D. dan Skousen K. Fred. (2004). *Akuntansi Intermediate*. Jakarta : Salemba Empat.
- Weygandt, Jerry J., Paul D. Kimmel, Donald E. Kieso. (2012). *Financial Accounting IFRS Edition*. United States of America : John Wiley & Sons.
- Zani, João, Eduardo Tomedi Leites, Clea Beatriz Macagnan, Márcio Telles Portal (2014). Interest on Equity and Capital Structure in the Brazilian context. *International Journal of Managerial Finance*, Vol. 10 Issue: 1, pp.39-53.
- [http:// www.sindonews.com](http://www.sindonews.com), diakses 27 februari 2018.
- [http:// www.idx.co.id](http://www.idx.co.id), diakses pada bulan Februari 2018.

[http:// www.sahamok.com](http://www.sahamok.com), diakses pada bulan Februari 2018.