

THE EFFECT OF ASSET  
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CONSUMER GOODS INDUSTR

# THE EFFECT OF ASSET STRUCTURE, INVESTMENT OPPORTUNITY SET, GROWTH OPPORTUNITY AND FIRM SIZE ON CAPITAL STRUCTURE WITH PROFITABILITY AND LIQUIDITY AS INTERVENING VARIABLES IN THE CONSUMER GOODS INDUSTRY SECTOR, 2017-2019

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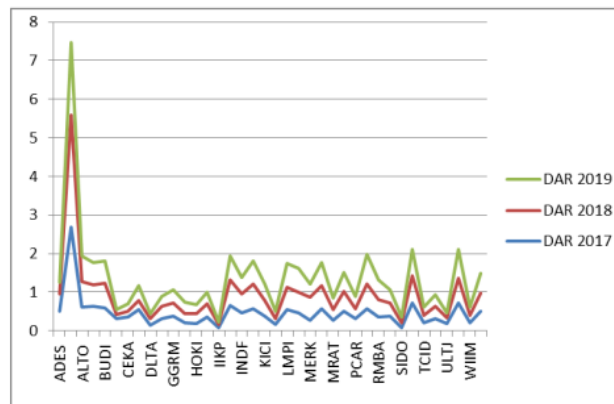
## 6 ABSTRACT

The goal of this study is to analyze the impact of asset structure, investment opportunities, growth opportunities and firm size on the profitability and liquidity capital structure of the consumer goods sector listed on the Indonesian Stock Exchange (IDX) for the period 2017-2019. The dependent variable in this analysis is the capital structure with debt-to-asset ratio (DAR) and debt-to-equity ratios (DER). In the meantime, the independent variables are asset structure, investment opportunities, growth opportunities and firm size. Intermediate variables of this analysis are profitability (ROE and ROA) and liquidity (Current Ratio and Quick Ratio). The research uses a quantitative approach. The population of this research is 61 consumer goods firms in 2017-2019. The sampling technique uses purposive sampling, given that the company submits an annual report for the period 2017-2019, so that 38 companies in the consumer goods sector are created. The findings of this analysis are those that have a direct impact on the capital structure of the properties, the investment prospects and the liquidity structure. As well as the composition of the properties, it also has a major impact on liquidity.

**Keywords:** Capital Structure, Asset Structure, Investment Opportunity Set, Growth Opportunity, Firm Size, Profitability, Liquidity.

## Introduction

Capital is one of the supporting factors to be able to carry out company activities. Every company in carrying out its activities always strives to maintain its financial balance.



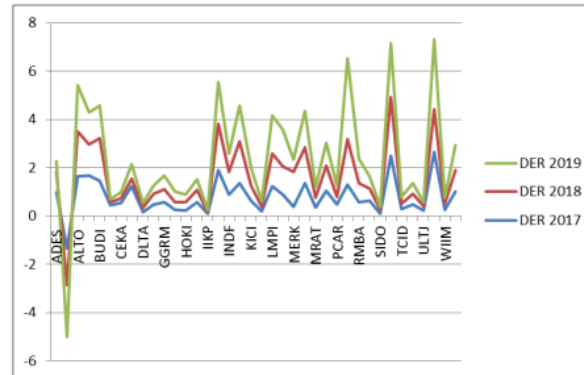
Picture 1

Graph of Capital Structure from DAR Aspect

Source: Processed Data

The graph above shows that the capital structure when assessed from the DAR aspect has increased every year. However, the fluctuating (up and down) graphic image then becomes a gap phenomenon. Where the higher the DAR value indicates: The bigger the assets financed by debt, the smaller the number of assets financed by capital, the higher the risk of the company to settle long-term obligations, the higher the debt burden that must be borne by the company. What must be considered in DAR is that it is able to generate high cash flow.

The company's capital structure also describes a company's ability to meet its long-term liabilities. The ratios used to measure this capability are debt to equity ratio (DER) and time interest earned.



Picture 2  
Graph of Capital Structure from DER Aspect  
Source: Processed Data

The graph above illustrates the capital structure from the DER aspect. A low DER indicates that the company's debt or liability is smaller than all the assets it owns. The amount of debt burden, can reduce the net profit received by the company or reduce profits for shareholders. Therefore, the higher the DER, the less the interest of new investors.

## Literature Review

### Financial management

Management is a process of planning, directing and controlling resources to achieve the goals set in a company. According to Sujarweni (2018: 9), to achieve its goals, companies must be able to control and control the operational activities of their companies by utilizing experts in the company who have the authority, duties and responsibilities in achieving this.

Meanwhile, financial management is an activity that is carried out with efforts to obtain funds with minimal costs and manage these funds effectively to achieve company goals (Sujarweni, 2018: 9). According to Harmono (2018: 2) financial management as an activity in obtaining and also managing funds effectively aims to maximize company value and increase shareholder welfare as measured by the company's share price which is used as a level in a measurement.

### Capital Structure

The ideal capital structure is a mix of debt and equity that maximizes firm value. In reality, businesses find it difficult to achieve an optimum capital structure. According to Kanita (2014), the capital structure of the shareholders will provide important information on the status of the

company, since the composition of the financing would have an effect on the valuation of the company. There are several theories of capital structure put forward by scholars, but only pecking order theory is used in this report.

The capital structure describes how a company finances all operating activities as well as the growth of the company from various funding sources and the capital structure also refers to how far the company uses debt financing to increase company profits (Setyawan, et al., 2016).

### **Asset Structure**

Asset Structure or Fixed Assets Ratio (FAR), also known as tangible assets, is the ratio between the fixed assets of the company and the total assets.

The asset structure is a distinction between the fixed assets and the total assets retained by the company. According to Devi, Sulindawati and Wahyuni (2017), companies with high asset structures prefer to opt to use non-party funds or leverage to finance their capital needs. The composition of the asset is a distinction between the fixed assets and the total assets owned by the company. According to Devi, Sulindawati and Wahyuni (2017), "companies with high asset structures tend to use non-party funds or leverage to finance their capital needs".

Based on the description above, it can be concluded that a company said to have high fixed assets on total assets tends to use a larger debt to meet its funding needs. So the asset structure has a positive correlation with the company's capital structure.

### **Investment Opportunity Set**

According to Erosvitha and Wirawati (2016), the investment opportunity set out is the relationship between current and future investments and value and prospects as a result of investment decisions to build company value and to demonstrate the extent of investment opportunities or opportunities for the company, but it really depends on the option of company expenditure for future interests.

Investment is an asset that a company uses for future wealth growth. Every company that makes a new investment in fixed assets is always in the hope that the company will get back the funds invested in the investment. The company will invest based on investment opportunities and sufficient capital.

According to Hartono (2003: 58) states as follows: "Investment Opportunity Set (IOS) describes the extent of investment opportunities or company opportunities."

### **Growth Opportunity**

According to Erosvitha and Wirawati (2016), the investment opportunity set is the relationship between current and future expenditures with value and prospects as a result of investment decisions to create company value and illustrate the extent of investment opportunities or opportunities for the company, however, it really depends on the choice of company expenditure for future interests. Investment is an asset that a company uses for future wealth growth. Every company that makes a new investment in fixed assets is always in the hope that the company will get back the funds invested in the investment. The company will invest based on investment opportunities and sufficient capital.

According to Hartono (2003: 58) states as follows: "Investment Opportunity Set (IOS) describes the extent of investment opportunities or opportunities for a company."

## ***Firm Size***

A large company where the shares are widespread, every the expansion of share capital will only have a small effect on the possibility of losing or shifting control from the dominant party over the company concerned (Utami and Widanaputra, 2017). So the bigger the company, the more courage the company will be in debt.

According to BambangRiyanto (2011: 19), <sup>2</sup> company size describes the size of a company which is shown in total assets, total sales, and average sales. There is also an opinion from Sartono (2010: 248). Companies that are well-established will find it easier to obtain capital in the capital market compared to small companies, because the ease of access means large companies have greater flexibility as well. Company size is the size of the company as seen from its total assets and sales. The greater the total assets owned, it shows that the bigger the size of the company. A scale which can be classified as large or small company according to various ways, including: Total assets long size, stock market value and others (Husnan, 2008).

## **Profitability**

Profitability is the company's ability to earn profits in relation to sales, total assets and own capital (Wibowo, 2016). Profitability is a measure in percentage used to assess the extent to which a company is able to generate profits at an acceptable level.

Forms of profitability ratios are used to indicate how much benefit or profit is gained from the results of a business that influences the financial statements notes that must comply with the financial accounting principles (Utami, 2020).

According to Visconti (2018) In corporate finance, return on <sup>4</sup>equity (ROE) is a calculation of the performance of the corporation in relation to the book value of shareholder equity, also known as net assets or assets minus liabilities. ROE is an indicator of how effectively an investment firm uses to produce profit growth.

Return on total assets (ROA) measures the level of return on assets used in generating that profit. According to Darminto (2019) This ratio calculates the rate of return on investment made by the company using all the funds (assets) it has. This Total Asset Ratio Return is determined.

## **Liquidity**

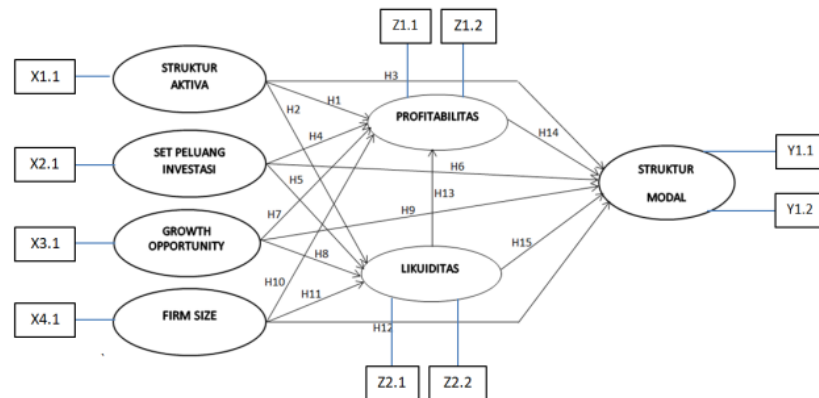
According to Harmono (2018: 106) the concept of liquidity can be interpreted as a company's ability to pay off <sup>3</sup>number of short-term debts, generally less than one year, where the concept of liquidity includes current ratio, quick ratio, cash ratio, and net working capital to total assets ratio. The liquidity ratio explains the company's ability to pay off short-term debt (Evans, 2000).

Liquidity is the willingness of a business to repay short-term liabilities, short-term obligations, or what may be considered existing loan, a debt that can be repaid within one year. According to Prihadi (2019: 200) liquidity measurements usually link short-term liabilities with current assets available to pay them off.

The current ratio is a ratio to calculate the degree to which the company's current assets are capable of paying off short-term liabilities, where this ratio has the potential for one year from the balance sheet date (Prihadi, 2018: 209).

The current ratio calculates all current assets, while the quick ratio removes the inventory element in current assets. According to Prihadi (2018: 211) this ratio only takes into account assets that are closer to cash.

## Conceptual Framework



Picture 3  
Conceptual Framework

### Keterangan:

#### X1: Asset Structure:

X1.1: Fixed Asset Ratio

#### X2: Investment Opportunity Set :

X2.1: Earning Per Share

#### X3: Growth Opportunity

X3.1: Delta Growth Opportunity

#### X4: Firm Size:

X4.1: Total Asset

#### Z1: Profitability :

Z1.1: Return on Equity (ROE)

Z1.2: Return on Asset (ROA)

#### Z2: Liquidity:

Z2.1: Current Ratio

Z2.2: Quick Ratio

#### Y1: Capital Structure

Y1.1 : Debt to Asset Ratio (DAR)

Y1.2 : Debt to Equity Ratio (DER)

## Research methodology

This study uses a quantitative approach. The population of this research is 61 companies in the consumer goods sector in 2017-2019. The sampling technique uses purposive sampling on the condition that the company provides an annual report for 2017-2019, so there is 38 companies that used in this research. The purpose of this study is to analyze the effect of asset structure, investment opportunity set, growth opportunity and firm size on capital structure with profitability and liquidity in the consumer goods sector. Analysis of the following research data is using the SmartPLS program.

## Method of collecting data

Collecting data in this study is from annual financial report documents on the consumer good industry sector which are listed on the Indonesia Stock Exchange. Where the document will be recorded and counted. Data is collected from IDX website (www.idx.co.id) and the sites of each selected company.

## Data analysis technique

The data analysis technique used in this study was Partial Least Square (PLS). PLS is part of Structural Equation Modeling (SEM) equation model with an approach based on variance or component-based structural equation model.

## Results and Discussion

### 1. Statistic analysis

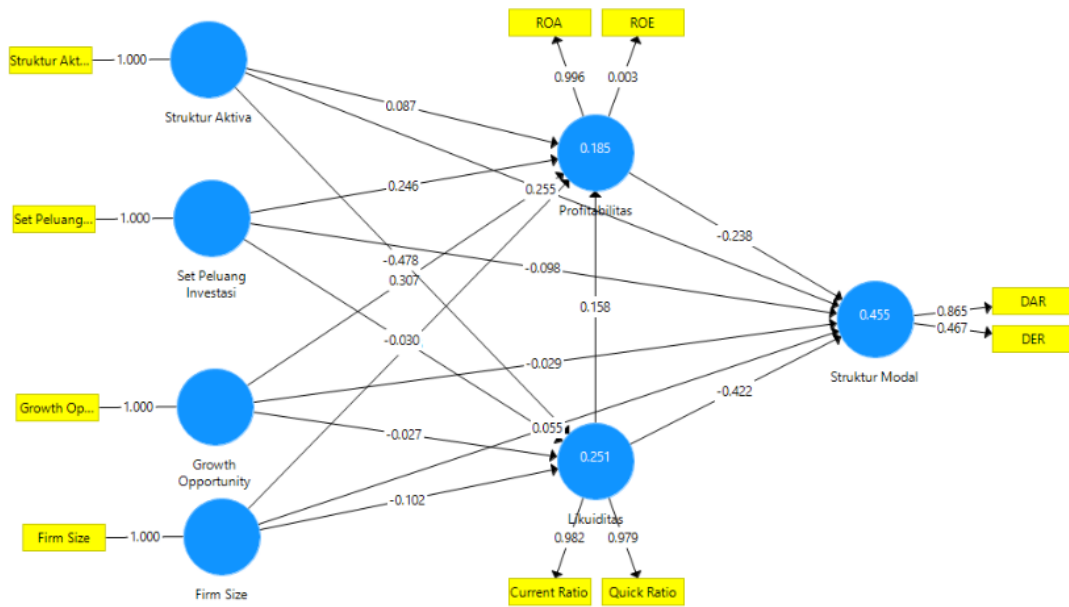
Descriptive statistical analysis provides a general description of the data in the form of mean, standard deviation, lowest value and highest value. The results of the descriptive analysis are as follows :

**Table 1 Descriptive Statistics**

Variable	Min	Max	Mean	St.Dev
Asset Structure	0.059199	0.805061	0.353359	0.167377
Investment Opportunity Set	-1626	5655	243.0529	782.9914
Growth Opportunity	-0.785841	2.302438	0.094181	0.272632
Firm Size	25.48905	32.20096	28.70512	1.623539
ROE	-0.97353	2.254461	0.168972	0.382702
ROA	-2.646606	0.92505	0.072954	0.302596
Current Ratio	0.152375	15.82231	2.942671	2.56006
Quick Ratio	0.13933	13.04449	1.911508	1.995608
DAR	0.065126	2.899874	0.448736	0.391737
DER	-2.127341	3.338925	0.784686	0.798776

### 1. Outer Model Evaluation

Evaluation of the measurement model is a stage to evaluate the validity and reliability of a construct, which consists of evaluation of construct validity and evaluation of construct reliability. Each will be explained as follows:



Picture4 Outer Model construct  
Source :SmartPLS

### Convergen Validity Test

Table 2 Convergent Validity Test Results after Reduction

Variabel	No. Indikator	Loading Faktor	AVE
Asset Structure	Asset Structure	1,000	1,000
Invesment Opportunity Set	Invesment Opportunity Set	1,000	1,000
Growth Opportunity	Growth Opportunity	1,000	1,000
Firm Size	Firm Size	1,000	1,000
Profitability	ROA	1,000	1,000
Liquidity	Current Ratio	0,982	0,961
	Quick Ratio	0,979	
Capital Structure	DAR	1,000	1,000

### Discriminant Validity Test

Table 3Result of Discriminant Validity TestCross Loading

	Firm Size	Growth Opportunity	Liquidity	Profitability	Invesment Opportunity Set	Asset Structure	Capital Structure
<b>Current Ratio</b>	-0.188	-0.003	<b>0.982</b>	0.075	-0.041	-0.488	-0.443
<b>DAR</b>	0.027	-0.211	-0.430	-0.410	-0.148	0.332	<b>1.000</b>



<b>Firm Size</b>	<b>1.000</b>	-0.046	-0.170	0.158	0.408	0.118	0.027
<b>Growth Opportunity</b>	-0.046	<b>1.000</b>	0.021	0.311	0.046	-0.094	-0.211
<b>Quick Ratio</b>	-0.143	0.045	<b>0.979</b>	0.093	-0.100	-0.466	-0.399
<b>ROA</b>	0.158	0.311	0.086	<b>1.000</b>	0.283	-0.009	-0.410
<b>Invesment Opportunity Set</b>	0.408	0.046	-0.071	0.283	<b>1.000</b>	-0.005	-0.148
<b>Asset Structure</b>	0.118	-0.094	-0.487	-0.009	-0.005	<b>1.000</b>	0.332

1 Based on the cross loading measurement in the table above, it can be seen that overall the indicators of all variables produce a loading value (bold font) that is greater than the loading value for other variables (viewed horizontally). Thus it can be stated that from the discriminant validity test, each indicator is able to measure the latent variable that corresponds to the indicator.

### Construct Reliability

Table 4 Result of Construct Reliability Construct

Variabel	Cronbach's Alpha	Composite Reliability
Asset Structure	1,000	1,000
Invesment Opportunity Set	1,000	1,000
Growth Opportunity	1,000	1,000
Firm Size	1,000	1,000
Profitability	1,000	1,000
Liquidity	0,960	0,980
Capital Structure	1,000	1,000

Based on the above table, it can be shown that only each variable produces a Chronbach alpha value greater than 0,6 or a composite reliability value greater than 0,7. Thus, on the basis of the estimation of the alpha value of Chronbach or the composite reliability value, all measures are declared accurate in the measurement of the variables.

### Inner Model Evaluation

#### Coefficient of Determination (R<sup>2</sup>)

Table 5 Result of Coefficient of Determination (R<sup>2</sup>)

Dependent Variabel	R Square	1-R Square	R Square Total
Liquidity	0.251	0.749	0.613
Profitability	0.191	0.809	
Capital Structure	0.361	0.639	

1 Table 5 shows that the R-square value on the Liquidity variable is 0.251 or 25.1%. This can indicate that the variety of liquidity variables can be explained by the Asset Structure, Investment

Opportunity Set, Growth Opportunity, and Firm Size variables by 25.1%. In other words, the contribution of the variable Asset Structure, Investment Opportunity Set, Growth Opportunity and Firm Size on Liquidity is 25,1%. The remaining 74,9% is the contribution of other variables not discussed in this report..

The R-square value on the Profitability variable is 0,191 or 19,1%. This shows that the diversity of the Profitability variable can be explained by the Asset Structure, Investment Opportunity Set, Growth Opportunity, Firm Size, and Liquidity variables by 19,1%. Or in other words, the contribution of the influence of the variable Asset Structure, Investment Opportunity Set, Growth Opportunity, Firm Size, and Liquidity on Profitability is 19,1%. The remaining 80,9%, is the contribution of other variables which are not discussed in this study.

The R-square value for the Capital Structure variable is 0,361 or 36,1%. This shows that the diversity of capital structure variables can be explained by the variable asset structure, investment opportunity set, growth opportunity, firm size, liquidity, and profitability by 36.1%. In other words, the contribution of the influence of the variable Asset Structure, Investment Opportunity Set, Growth Opportunity, Firm Size, Liquidity, and Profitability to Capital Structure is 36,1%. While the remaining 63,9% is the contribution of other variables which are not discussed in this study.

The total R-square value is 0,613 or 61,3%. This can indicate that the diversity of capital structure variables can be explained by the variable Asset Structure, Investment Opportunity Set, Growth Opportunity, Firm Size, directly or indirectly through Liquidity and Profitability of 61,3%. Or in other words, the contribution of the influence of the variable Asset Structure, Investment Opportunity Set, Growth Opportunity, Firm Size on Capital Structure directly or indirectly through Liquidity and Profitability is 61,3%. While the remaining 38,7% is the contribution of other variables not discussed in.

## Hypothesis Test

**Tabel 4.4 Hypothesis Testing Results**

The Effect	Coefficient	T Statistics	P Values	Notes
Asset Structure->Profitability	0.085	0.863	0.389	Not Significant
Asset Structure-> Liquidity	-0.478	9.108	0.000	Significant
Asset Structure->Capital Structure	0.160	2.028	0.043	Significant
Invesment Opportunity Set->Profitability	0.244	1.742	0.082	Not Significant
Invesment Opportunity Set->Liquidity	-0.030	0.512	0.609	Not Significant
Invesment Opportunity Set->Capital Structure	-0.086	2.074	0.039	Significant
Growth Opportunity ->Profitability	0.308	1.883	0.060	Not

				Significant
Growth Opportunity -> Liquidity	-0.027	0.321	0.748	Not Significant
Growth Opportunity ->Capital Structure	-0.078	1.097	0.273	Not Significant
Firm Size ->Profitability	0.088	0.690	0.490	Not Significant
Firm Size -> Liquidity	-0.102	1.824	0.069	Not Significant
Firm Size ->Capital Structure	0.039	0.499	0.618	Not Significant
Liquidity ->Profitability	0.153	1.812	0.071	Not Significant
Profitability ->Capital Structure	-0.339	1.077	0.282	Not Significant
Liquidity->Capital Structure	-0.322	3.636	0.000	Significant

Indirect effect analysis is useful for testing the hypothesis of the indirect effect of an influencing (exogenous) variable on the affected (endogenous) variable which is mediated by an intervening variable (mediator variable).

Based on the results of the SmartPLS test, it was found that the P-Value met the criteria, namely P-Value <0.05, which is the effect of asset structure on capital structure and liquidity as an intervening variable (Asset Structure -> Liquidity -> Capital Structure). This shows that liquidity is able to mediate the asset structure against the capital structure. Meanwhile, other hypotheses produce P-values > 0.05, which means insignificant where the mediator variable does not mediate the effect of an exogenous variable on an endogenous variable. In other words, the effect is direct.

## CONCLUSION

The higher the DER, the higher the composition of the company's debt or liabilities is greater than the overall net capital it holds, so that outsiders or the company's sources are very reliant on outside parties, resulting in a large burden. The amount of the debt burden can decrease the company's net profit or reduce shareholder income.

A high asset structure tends to use outside parties' assets. The structure of the asset is an important element in the financial structure of the business, since it may serve as leverage for outsiders who provide loans whether the asset is tangible or a given asset.

The investment opportunity set is a proxy for the future growth of the company, so that if the growth of the company is strong, investors can take investment opportunities to increase the benefit of the company. A trade-off theory in which firms that have the potential to gain high profits prefer to raise their external capital capacity in the capital structure of the organization is one theory that describes the relationship between company profits and capital structure.

Businesses that have rapid growth also have to raise their fixed assets. In the future, therefore, companies with high growth rates need more funds and also have more profits. Companies that expect to experience high growth in the future tend to prefer to use shares to finance company activities.

The Pecking Order Principle notes that internal funding is prioritized by businesses. There are significant internal funds for businesses with high profitability, so the business can first use internal funds. If the profit created by the organization is greater, the capital structure that comes from debt would be decreased. In general, businesses with high levels of profit use less debt because the revenues are used as a source of funds.

If the company is willing to meet its obligations in the short term, the company shall be in liquid state. A low current ratio shows a high risk of liquidity, causing the business to be illiquid and reducing the degree of profitability.

From this research, the result is that liquidity is able to mediate the asset structure against the capital structure. While the other variables has direct effect.

# THE EFFECT OF ASSET STRUCTURE, INVESTMENT OPPORTUNITY SET, GROWTH OPPORTUNITY AND FIRM SIZE ON CAPITAL STRUCTURE WITH PROFITABILITY AND LIQUIDITY AS INTERVENING VARIABLES IN THE CONSUMER GOODS INDUSTRY

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