

+++++

## THE EFFECT OF FINANCIAL PERFORMANCE, FIRM SIZE, AND ASSET GROWTH ON CAPITAL STRUCTURE

Desvi Nurdiana Nabila Fitrianingrum\*, Suhendro, Endang Masitoh

\*Batik Surakarta Islamic University, [dhesvidiana3643@gmail.com](mailto:dhesvidiana3643@gmail.com)

### Abstract

This study aims to examine and analyze the effect of Financial Performance (Return on Assets and Current Ratio), Company Size, and Asset Growth on the Capital Structure of Property and Real Estate Companies listed on the Indonesia Stock Exchange in 2016-2018. The independent variables in this study are return on assets, current ratio, company size, and asset growth. The dependent variable in this study is the capital structure. The sampling method uses purposive sampling. The sample in this study is 31 property and real estate companies in the 2016-2018 period, according to the criteria that have been determined to total of 93 companies over a three-year period. The analytical method used is multiple regression analysis using SPSS version 17.0. The results of this study Return on Asset, Current Ratio, Company Size, and Asset Growth simultaneously influence the Capital Structure. Partially Return on Assets and Asset Growth do not affect the Capital Structure, while the Current Ratio and Firm Size affect the Capital Structure. The benefit of this research is that it can broaden horizons and simultaneously gain knowledge about the effect of return on assets, current ratio, company size, and asset growth on capital structure.

*Keywords: Financial Performance, Firm Size, Growth, Capital Structure.*

### 1. Introduction

One of the methods used by the company to grow its business is by increasing the company's performance. To improve financial performance the manager's task is to make decisions regarding the capital structure used to mark all activities within the company, such as long-term debt, preferred stock, and shareholder capital. If the capital structure in the company is optimal, it can be said that the company's funding system is efficient. According to Husnan (2004), optimal capital structure is the ratio of debt and own capital in a company's financial structure.

The problem of capital structure for companies makes a manager should know what factors affect a company's capital structure. Several factors affect capital structure, namely Return on Assets, Current Ratio, Company Size, and Asset Growth. There are several researchers what factors influence the capital structure. The results of the study (Lina & Amir, 2018) show that Return on Assets and Current Ratio affect the Capital Structure, while the Company Size and Growth have no effect on the Capital Structure. The study is not in accordance with the research (Harahap & Irawan, 2018) states that return on assets does not affect the capital structure and (Abdillah, Ikhsan, & Mutia, 2018) states that company size and asset growth affect the capital structure.

In this study the problem can be formulated as follows: (1) Does Financial Performance affect the Capital Structure? (2) Does the size of the company affect the capital structure? (3) Does Asset Growth affect the Capital Structure? And the purpose of this study are: (1) To test and analyze Financial Performance of the Capital Structure. (2) To test and analyze company size against capital structure. (3) To test and analyze Asset Growth on the Capital Structure.

This study is useful for: (1) Academics, as a reference for further research on the effect of return on assets, current ratio, company size, and asset growth on capital structure from a different perspective. (2) For the Government, it is expected that the results of this study can contribute to the company's management in making optimal capital structure policies in order to maximize growth.

## **2. Literature Review**

### **Agency Theory**

This research uses agency theory. Jensen & Meckling (1976) said that an agency relationship is a contract between one or more people (principals), namely investors with parties who receive authority (agents), namely managers, in the form of cooperation contracts.

This theory was put forward by Michael C. Jensen and William H. Meckling in 1976. According to this approach, capital structures are structured in such a way as to reduce conflicts between various interest groups (Mamduh M. Hanafi, 2003). Management is an agent of the shareholders, as the owner of the company. Shareholders expect agents to act on their behalf. To be able to carry out its functions properly, management must be given rewards and supervision. Supervision can be done through ways such as improving agents, checking financial statements, and limiting decisions that management can make. Supervision activities require a fee called *agenci*. *Agenci* costs are costs associated with management supervision to ensure that management acts consistently in accordance with the company's contractual agreement with creditors and shareholders Van Horne and Wachowics, 1998.

### **Capital Structure**

Capital structure is the most important part in a company's activities. The source of funds obtained by the capital structure consists of sources of funds within the company and from outside the company. According to Husnan (2004), states that the capital structure is a comparison of debt and own capital in the company's financial structure. Therefore in this study capital structure is measured by Debt To Equity Ratio (DER) which is a ratio to measure the level of debt use to the total own capital of the company. The higher the DER shows the composition of total debt is greater than the total itself, so that the greater the burden of the company's burden on external parties (creditors).

### **Financial Performance**

Performance is a picture of the achievement of a company's activities in realizing goals, objectives, mission. Or the vision of an organization contained in a company's strategic planning. Meanwhile, financial performance is a picture of the achievement of the company's success can be interpreted as the results that have been achieved for various activities that have been carried out. Can be explained that financial performance is a study conducted based on the implementation of financial rules that are good and right (Fahmi I., 2012). Financial performance in this study includes Return On Assets and Current Ratio. Each of these mechanisms is explained as follows:

#### *1) Return On Assets (ROA)*

Return On Assets are used to measure the company's ability to generate profits and utilize assets owned to determine the company's performance based on the company's ability to utilize the amount of assets owned, the company's financial performance in generating net income from the assets used will have an impact on the

company's shareholders. Thus, it will increasingly make investors and or potential investors interested in investing their funds into the company (Atmaja, 2008).

### *2) Current Ratio*

Current Ratio shows the company's ability to pay short-term obligations. The higher the current ratio means that it will give a positive signal to the company that it has a good ability to pay its short-term obligations, so that the trust of creditors increases and makes it easier for companies to obtain long-term debt.

### **Firm Size**

Firm size illustrates the size of a company that will affect the capital structure, where the larger a company, the greater the funds needed by the company to do its investment. This is because large companies also need large funds to support their operations and one alternative to fulfillment is with external funding (Septiani & Suaryana, 2018).

### **Asset Growth**

Asset Growth is defined as the average growth of a company's wealth. Assets are all assets owned by the company and provide economic benefits in the future (Kusmuriyanto, 2005). In accordance with agency theory, the desire of shareholders is to make the company become bigger and get the benefits of its investment. Companies that experience high asset growth usually do debt or use external funds. The occurrence of assets that have increased, followed by an increase in operating results can certainly add to the trust of other parties to the company. Increasing assets by using capital from debt means that if assets are added, debt will increase automatically DER will increase, so the higher the asset, the greater the DER.

### **Previous Research**

Research conducted by Harahap & Irawan (2018) examines the Effect of Profitability, Asset Growth and Company Size on Capital Structure (Case Study of Real Estate and Property Companies listed on the Indonesia Stock Exchange in 2013-2015). The independent variable of this research is Profitability (X1), Asset Growth (X2), Company Size (X3) while Dependent Variables are Capital Structure (Y). Data analysis techniques used multiple linear regression analysis. The results of this study indicate that the profitability and firm size variables do not affect the capital structure, while the simultaneous test shows that profitability, asset growth, and company size affect the capital structure.

In addition, research conducted by Abdillah AN, Ikhsan S, and Mutia I (2018) examined the Factors Affecting Capital Structure of Go Public Manufacturing Companies on the Indonesia Stock Exchange. The independent variable of this study is Company Size (X1), Business Risk (X2), Growth Assets (X3), Profitability (X4) while Dependent Variables are Capital Structure (Y). The results of this study indicate that company size, business risk, asset growth, and profitability affect the capital structure.

Research conducted by Lestari & Purnawati (2018) examines the Analysis of the Effects of Financial Performance on Capital Structure in Food and Beverage Companies on the IDX. Data analysis techniques used multiple linear regression analysis. The analysis shows that liquidity, profitability, company size, and company growth influence the capital structure. Research conducted by Lina & Amir (2019) examined the effect of Return on Assets, Current Ratio, Size, and Growth on the Capital Structure of Manufacturing Companies listed on the Indonesia Stock Exchange in the 2013-2015 Period. The independent variable of this study is Return On Assets (X1), Current Ratio (X2), Size (X3), and Growth (X4) while the dependent variable is Capital Structure (Y). Data analysis techniques used multiple linear regression analysis. The results of this study are Return On Assets and Current Ratio affect the Capital Structure, while the Size and Growth does not affect the Capital Structure.

### 3. Methods

This type of research is quantitative research. According to Sugiyono (2012) quantitative research in looking at the relationship of variables to the object under study is more causal, so in his research there are independent and dependent variables. The data in this study use secondary data from the financial statements of the property and real estate subsector companies in 2015-2017 downloaded from the website [www.idx.co.id](http://www.idx.co.id).

The sample in this study is the property and real estate subsector on the Indonesia Stock Exchange from 2016-2018. The sampling technique in this study uses a purposive sampling technique, which determines sampling based on certain criteria. The criteria set in the sampling are: (1) Property & real estate companies that have been and are still listed on the Indonesia Stock Exchange in 2016-2018. (2) The sample company issues financial reports for 3 consecutive years, namely 2016-2018. (3) Companies whose annual financial statements use the rupiah. (4) Property & real estate companies that make a profit in 2016-2018.

The dependent variable is the variable that is affected or disturbed by other variables. The dependent variable used in this study is the Capital Structure (Y), the capital structure in this determination is proxied by Debt To Equity Ratio (DER) which is a ratio measuring the company's ability to return debt costs through its own capital as measured through debt and total capital (equity). Calculated with the following formulation (Ang, 1997):

$$\text{DER} = (\text{Total Debt}) / (\text{Total Equity})$$

The independent variables in this study are Return On Assets, Current Ratio, Company Size, and Asset Growth.

According to Hanafi (2012), ROA is a ratio used to measure a company's ability to generate net income. ROA reflects the company's ability to obtain net profit after tax from the total assets used for the company's operations. To calculate ROA using:

$$\text{ROA} = (\text{Net Income After Tax}) / (\text{Total Assets})$$

According to Hery (2016) Current Ratio is a ratio used to measure a company's ability to meet its short-term obligations that are due soon by using the total available current assets. Current Ratio (CR) can be calculated using the formula:

$$\text{Current Ratio} = (\text{Current Assets}) / (\text{Current Debt})$$

Firm size is a value that indicates the size of the company. To measure the size of the company, refer to Weston J. Fred and Thomas (2008), the size of the company using the formula:

$$\text{Firm Size} = \text{Logn} (\text{Total Assets})$$

Asset growth is measured using the quotient between the difference between the value of total assets in the year t and the total assets of the year t-1 with total assets in the year t-1. Asset Growth is formulated as follows:

$$\text{Asset Growth} = (\text{Total Assets (t)} - \text{Total Assets (t-1)}) / (\text{Total Assets (t-1)})$$

Where :

Total Assets (t) = Value of total assets for the year

Total Assets (t-1) = Total value in the year before the year concerned

**Multiple Linear Regression Analysis Test**

$$Y = \alpha + \beta ROA (X_1) + \beta CR (X_2) + \beta UP (X_3) + \beta PA (X_4) + e$$

Information :

- Y = Capital Structure
- $\alpha$  = Constant
- ROA (X1) = Return on Asset
- CR (X2) = Current Ratio
- UP (X3) = Firm Size
- PA (X4) = Asset Growth
- $\beta_1 \beta_2 \beta_3 \beta_4$  = Partial Regression Coefficient
- e = Error

**4. Results and Discussion**

The sample in this study were 54 property and real estate companies listed on the Indonesia Stock Exchange for the period of 2016-2018. Sampling in this study with a purposive sampling method.

**Table 1. Determination of Research Samples**

Purposive Sampling Criteria	Total
1. 1. All Property and Real Estate Companies listed on the Indonesia Stock Exchange for the period of 2016-2018.	48
2. 2. A sample company that has not issued financial reports for three years in a row is 2016-2018.	(8)
3. 3. Companies whose annual financial statements do not use the rupiah.	(0)
4. 4. Property and Real Estate Companies that suffered losses in 2016-2018.	(9)
Number of Company Samples	31
Number of Observations in 2016-2018 (31 Companies x 3 years)	93
Data outsourced	(39)
Data used in research	54

*Source: Researcher data (2019).*

**Descriptive Statistics Test**

**Table 2. Descriptive Statistics Test**

Variables	N	Minimum	Maximum	Mean	Std. Deviation
ROA	54	0,002	0,118	0,04126	0,031016
Current Ratio	54	0,394	8,268	2,63365	2,170640
Firm Size	54	23,752	31,670	2,947221	1,568885
Asset Growth	54	-0,003	0,245	0,08007	0,055510
Capital Structure	54	0,079	3,094	0,88307	0,552429
Valin N (listwise)	54				

*Source: Output SPSS (2019).*

**Classic Assumption Test**

**Table 3: One Sample Kolmogorov-Smirnov**

	Unstandardized Residual	Standard	Information
<b>Kolmogorov- Smirnov Z</b>	0,612		
<b>Asymp. Sig. (2-tailed)</b>	0,849	> 0,05	Normal Distributed Data

*Source: Output SPSS (2019).*

Based on the Table of Normality Test Results in the table above shows that the significant value of Kolmogorov-Smirnov (K-S) is 0.849, meaning that the value is greater than 0.05, then concluded normal distribution.

**Multicollinearity Test**

**Table 4. Multicollinearity Test Results**

Variables	Tolerance	Std	VIF	Std	Status
ROA	0,884	> 0,1	1,131	< 10	Good
Current Ratio	0,986	> 0,1	1,014	< 10	Good
Firm Size	0,929	> 0,1	1,077	< 10	Good
Asset Growth	0,955	> 0,1	1,047	< 10	Good

*Source: Output SPSS (2019).*

From the table it can be understood that there is no multicollinearity problem from this research equation. This shows with a Tolerance value > of 0.1 and VIF Value <of 10.

**Autocorrelation Test**

**Table 5. Autocorrelation Test Results**

Variable	Sig.	Std	Conclusion
<i>Asymp. Sig. (2-tailed)</i>	0,054	>0,05	No utocorrelation occurred

*Source: Output SPSS (2019).*

From the table it can be seen that the Asym probability value. Sig. (2-tailed) of 0.054 which means that the value is greater than the standard significance value so that it can be concluded that there is no autocorrelation.

**Heteroscedasticity Test**

**Table 6. Heteroscedasticity Test Results**

Variables	Unstandardized Residual	Standard	Keterangan
ROA	0,594	>0,05	Good
Current Ratio	0,979	>0,05	Good

Firm Size	0,051	>0,05	Good
Asset Growth	0,547	>0,05	Good

Source: Output SPSS (2019).

### Multiple Linear Regression Test

#### Regression Model

**Table 7. Results of Multiple Linear Regression Tests**

Variables	B	Sig
Constanta	-1,703	0,203
Return on assets	-3,502	0,127
Current Ratio	-0,106	0,001
Size	0,100	0,027
Company	0,930	0,447

Source: Output SPSS (2019).

Based on the test results in the above table, we get the following linear regression equation:

$$Y = -1,703 - 3,502 X1 - 0,106 X2 + 0,100 X3 + 0,930 X4 + e$$

#### Model Feasibility Test (F Test)

**Table 8. F Statistical Test Results**

Information	F value	F table	Sig	Standard	Conclusion
F Test	5,351	2,56	0,001	< 0,05	Decent Model

Source: Output SPSS (2019).

Based on the Table shows that F Calculate > F Table and the significance value <0.05 so that the model is said to be feasible to test the effect of independent variables on the dependent variable.

#### Hypothesis Test (t test)

**Table 9. Hypothesis Test Results (t Test)**

Hypothesis	T <sub>value</sub>	T <sub>table</sub>	Sig	Standard	Status
Return on assets	-1,551	-2,010	0,127	< 0,05	Rejected
Current Ratio	-3,458	-2,010	0,001	< 0,05	Accepted
Firm Size	2,286	2,010	0,027	< 0,05	Accepted
Asset Growth	0,767	2,010	0,447	< 0,05	Rejected

Source: Output SPSS (2019).

Based on the partial test table above, it shows that Return on Assets, Asset Growth has no effect on the Capital Structure. and for Current Ratio and Firm Size influence on the Model Structure.

**Determinant Coefficient (R2)**

**Table 10. Determinant Coefficient Test Results (R2)**

Model	R <sup>2</sup>	Adjusted R square
1	0,304	0,247

*Source: Output SPSS (2019).*

Based on the table Adjusted R Square Test results in this study obtained a value of 0.247. This shows that the capital structure (DER) is influenced by return on assets, current ratio, firm size, and asset growth by 24.7%. While the remaining 75.3% is influenced by other factors not examined in this study.

**Discussion**

*Effect of Return on Assets on Capital Structure*

The analysis shows that Return on Asset has no effect on capital structure. one of the reasons is because in the last few years property and real estate companies are experiencing a recession where the company faces a problem of decreasing sales results which results in a small amount of profit. Therefore, creditors and investors tend to be oriented towards long-term business with the hope of improving economic conditions. These results are in line with research conducted (Harahap & Irawan, 2018) which states that Return on Assets does not affect the Capital Structure.

*Effect of Current Ratio on Capital Structure*

The results of this study indicate that the current ratio affects the capital structure, the higher the liquidity of the company will tend not to use debt financing, because companies with high liquidity have large internal funds so the company will prefer to use its internal funds first to finance its operations. These results are in line with research conducted (Noviandini, 2017) states that Current Ratio affects the Capital Structure.

*Effect of Firm Size on Capital Structure*

The results of this study indicate that company size has an effect on capital structure, indicating that the larger the size of the company, the greater will be external funds, especially debt owned by the company, thus increasing capital structure. This research is in line with research conducted (Lestari, Enas, & Faruk, 2019) which states that company size influences capital structure.

*Effect of Asset Growth on Capital Structure*

The results of this study indicate that asset growth has no effect on capital structure, this shows that the higher the growth rate of assets, the more likely they are to use their own capital rather than debt. So it can be concluded that the company did not experience significant growth or increase in assets. The results of this study concur with research conducted by (Marfuah & Nurlaela, 2017) which states that asset growth has no effect on capital structure.

**5. Conclusion**

Based on the research results obtained through statistical testing and discussion as described in the previous chapter, it can be concluded that the Return On Asset has no effect on the Capital Structure, this is because in recent years the company has faced the problem of a decrease in sales results which resulted in the amount of profit obtained small. Therefore, creditors and investors tend to be oriented towards long-term business with the hope of improving economic conditions. While the Current Ratio affects the Capital Structure, this is due to the higher liquidity the company has, it tends not to use debt financing. The size of the company



affects the capital structure, this shows that the larger the size of the company, the greater will be external funds, especially debt owned by the company. In addition, Asset Growth does not affect the Capital Structure, this shows that the higher the growth rate of assets, the more likely they are to use their own capital rather than debt. So it can be concluded that the company did not experience significant growth or increase in assets. Based on the research results and conclusions above, the Research Limitations contained in this study are: 1. This study only uses four independent variables so that the strength of Return On Assets, Current Ratio, Company Size, and Asset Growth on the Capital Structure in Property and Real Companies Estate that can be seen from the determination coefficient value is only 24.7%. 2. This study only took a period of three years, namely 2016-2018, so the data taken might not reflect the company's condition in the long run.

Based on the limitations of the research, the following suggestions can be given: 1. For the next research, it is expected not only to be limited to property and real estate companies listed on the IDX, so that they can represent all listed companies listed on the IDX. 2. For the next research it is expected that the observation period is longer, so that the data taken can be used to observe the company's condition in the long run. 3. The next researcher is expected to be able to expand the research population and increase the number of research variables, for example tangibility, sales growth, etc. So that in subsequent studies produce more supportive information.

### **References**

- Abdillah, A., Ikhsan, S., & Mutia, I. (2018). Factors Affecting Capital Structure of Go Public Manufacturing Companies in BEI (Indonesia Stock Exchange). *Jurnal Internasional Penelitian Akuntansi*, Vol. 6, Edisi 1, 1-4.
- Angg, R. (1997). *Buku Pintar Pasar Modal Indonesia (The Intelligent Guide to Indonesian Capital Market)*. Jakarta : Mediasoft Indonesia.
- Atmaja, L. (2008). *Teori dan Praktik Manajemen Keuangan . Yogyakarta : Andi*.
- Fahmi, I. (2012). *Analisis Laporan Keuangan. Cetakan Ke-2. Bandung : Alfabeta*.
- Harahap, A. K., & Irawan, A. E. (2018). Pengaruh Profitabilitas, Pertumbuhan Asset, dan Ukuran Perusahaan terhadap Struktur Modal (Study Kasus Pada Perusahaan Real Estate dan Property yang terdaftar di BEI Tahun 2013-2015). *Jurnal Bisnis Darmajaya*, Vol. 4, No. 1, Januari , 12-25.
- Hermeindito. (2003). Prediksi Struktur Modal Berbasis Pecking Order Theory Pada Kondisi Ekonomi Normal dan Ekonomi Krisis. *Kajian Bisnis STIE Widya Wiwaha Yogyakarta*, No. 28 (Januari-April), 51-66.
- Herni, & Susanto, Y. K. (2008). Pengaruh Kepemilikan Publik, Praktik Pengelolaan Perusahaan, Jenis Industri, Ukuran Perusahaan, Pofitabilitas dan Risiko Keuangan Terhadap Tindakan Perataan Laba (Studi Empiris pada Industri yang Listing Di Bursa Efek Jakarta). *Jurnal Ekonomi dan Bisnis Indonesia*, 302-304.
- Husnan, S. (2004). *Dasar-dasar manajemen keuangan*, Yogyakarta: UPPAMP YKPN.
- Lestari, L. P., Enas, & Faruk, M. (2019). Pengaruh Kinerja Keuangan dan Ukuran Perusahaan terhadap Struktur Modal. *Jurnal Manajemen*, Vol. 1, No. 3 September, 185-200.
- Lestari, N. L., & Purnawati, N. K. (2018). Analisis Pengaruh Kinerja Keuangan Terhadap Struktur Modal Pada Perusahaan Makanan dan Minuman di BEI. *Jurnal Ekonomi Manajemen Unud*, Vol 7, No. 7 , 3564-3593.
- Lina, & Amir, A. (2018). Pengaruh Retrun On Asset, Current Ratio, Size dan Growth terhadap Struktur Modal pada Perusahaan Manufaktur yang terdaftar di BEI Periode 2013-2015. *Jurnal Riset Akuntansi Going Concern 13(4)*, 893-902.
- Marfuah, S. A., & Nurlaela , S. (2017). Pengaruh Ukuran Perusahaan, Pertumbuhan Asset, Profitabilitas dan Pertumbuhan Penjualan terhadap Struktur Modal Perusahaan Cosmetic and Household di Bursa Efek Indonesia. *Jurnal Akuntansi dan Pajak* Vol.18, No.1.
- Noviandini. (2017). Pengaruh Current Ratio, Return On Asset dan Total Asset Turnover terhadap Struktur Modal pada Perusahaan Publik Sub Sektor Makanan dan Minuman Periode 2011-2015. *Jurnal Akuntansi dan Keuangan*, Vol. 6 No. 1 April , 1-19.
- Riyanto. (2001). *Dasar-dasar Pembelanjaan Perusahaan. Edisi Keempat. Yogyakarta: BPFE-UGM*.

- Septiani, N. P., & Suaryana, I. G. (2018). Pengaruh Profitabilitas, Ukuran Perusahaan, Struktur Aset, Risiko Bisnis dan Likuiditas pada Struktur Modal . *E-Jurnal Akuntansi Universitas Udayana*. Vol.22.3 Maret , 1682-1710.
- Sunarwi. (2010). Analisis Faktor-faktor yang Mempengaruhi Struktur Modal Serta Dampak Struktur Modal Terhadap Return Saham Perusahaan Manufaktur Yang Terdaftar di BEI Periode 2006-2008 (Studi Kasus Pada Sektor Food and Beverage). *Jurnal Akuntansi*.
- Sunarwi. (2010). Analisis Faktor yang Mempengaruhi Struktur Modal Serta Dampak Struktur Modal terhadap Return Saham Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia. Fakultas Ekonomi Universitas Diponegoro.