Effect of Capital Structure and Sales Growth on Intrinsic Value of Companies with Profitability as Intervening Variables in Property, Real Estate and Construction Companies

Siti Astari Luthfi¹, Fachrudin², Khaira Amalia Fachrudin³

¹(Universitas Sumatera Utara, Indonesia)

²(Universitas Sumatera Utara, Indonesia)

³(Universitas Sumatera Utara, Indonesia)

Corresponding Author: Siti Astari Luthfi

Abstract: The intrinsic value of a firm is the fair value of all future net cash flows resulted from a business. The purpose of this research is to examine the effect of financial distress and firm size on profitability; the effect of financial distress, firm size, and profitability on intrinsic value of firm; and the indirect effect of financial distress and firm size on intrinsic value of firm by profitability as intervening variable. The population of the research was the companies in property and real estate sector listed in BEI (Indonesia Stock Exchange) in 2016. There were 37 firms selected out of the population. The statistics method which used to test hypotheses is path analysis. The result show that financial distress had a negative and significant influence on profitability, firm size had a positive and insignificant influence on profitability, financial distress had a negative and insignificant influence on intrinsic value, firm size and profitability had a positive and significant influence on intrinsic value, profitability could mediate the correlation of financial distress with intrinsic value of firm, and profitability could not mediate the correlation of firm size with intrinsic value of firm at alpha 5%.

Keywords: Financial Distress, Firm Size, Profitability, Free Cash Flow to Firm, Discounted Cash Flow, Intrinsic Value of Firm

Date of Submission: 28-07-2019

Date of Acceptance: 13-08-2019

I. Introduction

Intrinsic value is based on different estimates and analyzes for a particular stock. Intrinsic value is the actual or supposed value of the stock, commonly referred to as the fair value of a stock. Theoretically intrinsic value should be the same as the stock price in the market but often different. So from that the intrinsic value of the company is used by investors as a basis for consideration to determine the buy or sell position of a company's stock by comparing it to the market price of the company's stock. If the intrinsic value is higher than the stock price on the market, the stock can be said to be in an undervalued condition which indicates that the stock is worth buying by investors because it is expected to rise towards its intrinsic value, conversely if the intrinsic value is lower than the stock price in the market, it can It is said that the shares are in an overvalued condition which indicates that the shares are not worth buying by investors, if the investor already owns the shares, they should sell the shares. But when the stock price in the market is the same as its intrinsic value, it means that the shares are fair-priced (Zuliani, 2014).

Analysis of the company's intrinsic value of shares needs to be done to provide a true picture of the fairness of the stock price being assessed, assessing the percentage strength of shares in ownership of the company and taking into account the level of risk and return on shares that make it easier for investors to buy or sell shares.

This analysis can be used by investors in various types of stocks in the capital market because variations in the types of stocks and companies on the IDX provide many opportunities for stock choices to an investor to determine investment decisions.

One of them is the shares of the property sector, real estate and building construction companies. Sectoral developments in these fields provide a perfect indication through investment in the stock exchange. Through the results of the BEI statistical report, investors can monitor company and sectoral performance, noting that the sectoral stock price index in this sector has the highest rate of growth in growth compared to other sectors.

It can be seen in the data that the property sector stock index rose by 29.02%, followed by the financial sector by 20.47% from the beginning of the year to the close of trading. Sectoral property price indexes, real

estate and building construction increased from the previous year so that this increase in growth ranked first compared to other sectors.

This was caused by several driving factors, one of which was the decline in the benchmark interest rate of Bank Indonesia (BI), the increasing number of middle class population and the government's plan to encourage infrastructure development as the reason foreign investors were interested in buying property shares in Indonesia.

The Composite Stock Price Index (CSPI) at the close of trading increased by 1.50%. Of the 10 sectoral stocks that rose the highest, namely finance 2.7% followed by property 2.7%. The JCI at the close of trading increased by 0.47%. The strengthening of the JCI brought sector gains with the highest increase in mining sector shares by 1.6% and second place in the property sector 1.2% at the end of 2014.

This phenomenon attracts the author to research the intrinsic value of companies in this sector in 2014 to 2016, because the existence of these conditions indicates that stocks in the property, real estate and building construction sectors are worth considering as investment options with the highest rate of increase in demand Investors in stock investing in this sector, shows an interesting indication of stock prices in this sector to be assessed on the intrinsic value of the company with profitability as an intervention variable so that the market value of the company's shares can be estimated traded in the capital market (Sukamuja, 2005).

There are two approaches to assessing the performance of a company, namely, technical analysis, carried out by analyzing the movement of prices of a company in the past and then making an estimate of the future shares of the company will experience trends in stock price developments or by using fundamental analysis, this analysis done by evaluating the company's performance through the company's fundamental information that comes from financial statements issued by the company concerned. The analysis indicators include liquidity, profitability, solvency and others.

Profitability is the ratio of management effectiveness based on the returns generated from sales and investments. The profitability ratio consists of profit margin, basic earnings power, return on assets (ROA) and return on equity (ROE). In this study profitability ratios are measured by return on assets (ROA). ROA is used by management to measure the company's ability to generate profits derived from assets owned by the company. ROA is a ratio that shows the results of the amount of assets used in the company or a measure of management efficiency.

II. Theoretical Review

2.1 Company Value

A company is an organization that combines and organizes various resources with the aim of producing goods and or services for sale. Initially company theory was based on the assumption that the purpose or objective of the company is to maximize current or short-term profits. However, based on observations, companies often sacrifice short-term profits to increase future or long-term profits. Because both short-term and long-term benefits are very important, company theory now postulates that the company's main purpose is to maximize the company's wealth or value. This is reflected in the present value of all expected company profits in the future (Kusumajaya, 2011).

2.2 Book Value

Book value per share (BVS) is used to measure the value of shareholders equity for each share and the value of BVS is calculated by dividing the total shareholders equity by the number of shares outstanding. The components of shareholders equity, namely paid up capital in excess of par value and retained earnings.

2.3 Stock Market Value

The stock market value as expressed in the capital market is another approach to estimating the net value of a business. If shares are registered in the main securities exchange and are widely traded, an approach value can be built based on market value. The market value approach is one of the most frequently used in valuing large companies.

However this value can change rapidly. Analysis factors compete with pure speculative influences and relate to public sentiments and personal decisions.

2.4 Intrinsic Value

The intrinsic value of the company is obtained from the present value of future cash inflows. To get the present value of the cash inflows, the projection or income forecast will be received by the company in the future at a certain time which then discounts the income with a certain discount rate. The discount model called the discounted cash flow (DCF) model is the method most often used to evaluate a company.

2.5 Free Cash Flow to Firm (FCFF)

A free cash flow to firm is the determination of a company's cash amount generated after capital expenditures such as building or property expenditure and working capital. The value of the company's operations will depend on all expected cash flows in the future, which is defined as operating profit before interest and tax minus a number of investments in working capital and fixed assets needed to maintain the business. Free cash flow will reflect cash that is truly available for distribution to investors.

2.6 Weighted Average Cost of Capital (WACC)

WACC is a calculation of the company's capital costs where each capital category is proportionally weighted. All sources of capital, including ordinary shares, preferred shares, bonds and other long-term debt, are included in the WACC calculation.

2.7 Profitability

Profitability is the company's ability to make a profit from the business activities it does. Profitability is measured using ROA that shows the overall ability of funds invested in assets to generate profits which is a comparison between net income and total assets (Brigham and Houston, 2010).

2.8 Capital Structure

According to Hamidy (2015) capital structure is a comparison between debt and equity, capital structure is an important problem in spending decisions. The optimum capital structure is a capital structure that can minimize the cost of using the average capital.

Modigliani and Miller (MM) propose two theories of capital structure with two different assumptions, namely the existence and absence of personal tax or corporate tax. They argue that capital structure is irrelevant or does not affect company value.

2.9 Sales Growth

Sales growth reflects the success of the company's operations in the past period and can be used as predictions of future growth. Sales growth is an important indicator of market acceptance of the product / service of a company, the revenue generated from sales will be used to measure the level of sales growth. In this study, the proxy uses the difference between the number of sales of this period and the previous period compared to the sales of the previous period.

III. Materials and Method

3.1 Types and Nature of Research

The research problem is a causal relationship, this research is categorized as a comparative causal study. Data and information are quantitative, that is, data uses calculations in the form of numbers.

3.2 Population and Research Samples

The study used a population of property and real estate sector companies listed on the Indonesia Stock Exchange (IDX) of 49 companies and construction companies as many as 9 companies, had a positive net cash flow and had complete data relating to the variables used in the study. The number of samples of companies that meet criteria 46.

3.3 Types and Data Sources

The data used are secondary data from property, real estate and construction companies listed on the Indonesia Stock Exchange, namely annual reports recorded in the period 2014 to 2016.

3.4 Data Analysis Method

This study uses descriptive qualitative analysis method to determine the existence of relationships between dependent variables and independent using inductive statistics correlation with multiple regression analysis. The qualitative descriptive objective in this study is to provide a systematic, factual and accurate description of certain facts.

a. Descriptive Analysis

Sugiyono (2004) explains that qualitative research methods are research methods used to examine natural objects, where researchers are key instruments, while data collection techniques are conducted by interview methods, data analysis is inductive, and the results of qualitative research emphasize meaning rather than generalization.

b. Path Analysis

Path analysis model is used to analyze the pattern of relationships between variables in order to determine the direct or indirect effects of a set of independent variables on the dependent variable.

Based on the formulation of the problem and the research hypothesis, it can be seen that the causal relationship between variables by describing the correlation coefficient is a direct and indirect influence. This relationship involves independent variables, namely profitability and intrinsic value of the company, independent variables, namely capital structure and sales growth. Problems that have characteristics of causal relationships between variables and the existence of a correlation between two variables, the analytical technique that can be used is using the path analysis estimation technique.

Therefore the research formulation in the path analysis framework only revolves around the independent variable $(X_1, X_2, ..., X_k)$ influencing the dependent variable Y, or how much direct, indirect, and total influence or simultaneous set of independent variables $(X_1, X_2, ..., X_k)$ to the dependent variable Y. Hypothesis testing using t test, F test, r squared test.

IV. Results and Discussion

4.1 Descriptive Analysis

Based on the results of the study, it can be seen that the average value of DER in the property, real estate and construction sector in the Indonesia Stock Exchange in 2016 amounted to 0.8994 with a standard deviation of 0.669 where the standard deviation was smaller than the average value. This shows the small capital structure fluctuations in the property, real estate and construction sector companies that were sampled. The minimum DER value is 0.03 and the maximum value is 2.69 with an average value of 0.8994 indicating that most companies use debt as their source of funding.

It can be seen from the results of the study that the average sales growth in the property estate and construction sector companies in the Indonesia Stock Exchange in 2016 was 0.617 and the standard deviation was 0.322 where the standard deviation was smaller than the average. This shows a small fluctuation in the value of sales growth in the property and construction sector companies that were sampled. From table 5.1 it can also be seen that the lowest corporate value is -0.63 and the highest value is 1,163. This shows that most property, real estate and construction companies experienced positive sales growth as measured by sales growth year after year.

On the results of the study it can be seen that the average ROA in the property sector, real estate and construction companies is 0.567 and the standard deviation is 0.062 where the standard deviation is smaller than the average which shows fluctuations in the value of profitability in property, real estate and construction companies become a sample. The minimum value is -0.04 and the maximum value is 0.36 with an average value of 0.567 stating that the property, real estate and construction sector companies that are sampled have a positive value of profitability.

4.2 Results and Discussion

Results

Analysis of Goodness of Fit First Substructure

a. Coefficient of Determination (R²)

The results of the coefficient of determination (R^2) is 0.229, which means that the influence of growth and DER variables on profitability variables is 22.9% while the remaining 77.1% is influenced by other variables not included in the study.

Table 5.1 First Substructure Determination Coefficient Test

Model Summary Adjusted R Std. Error of the Estimate Model R R Square Square Estimate 1 .479a .229 .195 .05606

a. Predictors: (Constant), GROWTH, DER

Source: Research Results

b. Simultaneous Significance Test (F Test)

In Table 5.2 obtained F count of 6.688 with a significance value of 0.003. This shows that the significance value is smaller than $\alpha = 0.050$, so it can be concluded that the DER and Growth variables together (simultaneous) can significantly influence the profitability variable.

Table 5.2 Simultaneous Test (F Test) First Substructure

ANOVA^D

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.042	2	.021	6.688	.003ª
	Residual	.141	45	.003		
	Total	.183	47			

a. Predictors: (Constant), GROWTH, DER

b. Dependent Variable: ROA

Source: Research Results

c. Test of Individual Parameters (t Test)

Based on Table 5.3 partially the results of the t-test statistic show the DER variable has a negative and significant effect with a p-value of 0.05 (< 0.05) on the ROA variable. Growth variables have a negative and significant effect with p-value 0.004 (< 0.05) on the ROA variable.

Table 5.3 Partial Test (Test t) First Substructure

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	Т	Sig.
1	(Constant)	.090	.014		6.373	.000
	DER	039	.013	414	-2.963	.005
	GROWTH	.083	.027	.426	3.050	.004

a. Dependent Variable: ROA

Source: Research Results

Analysis of Goodness of Fit Second Substructure

a. Coefficient of Determination (R²)

The results of the coefficient of determination (R^2) are 0,262, which means the influence of the variables growth, DER and ROA on the variable value of the company is 26.2% while the remaining 73.8% is influenced by other variables not included in the study.

Table 5.4 Second Substructure Determination Coefficient Test

Model Summary

Model	R	R Square	,	Std. Error of the Estimate
1	.512ª	.262	.212	1.48823E5

a. Predictors: (Constant), ROA, DER, GROWTH

Source: Research Results

b. Simultaneous Significance Test (F Test)

In Table 5.5 obtained F count of 5.208 with a significance value of 0.004. This shows that the significance value is smaller than $\alpha = 0.050$, so it can be concluded that the DER variable, Growth and ROA together (simultaneously) can significantly influence the value variable of the company.

Table 5.5 Simultaneous Test (F Test) Second Substructure
ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.461E11	3	1.154E11	5.208	.004ª
	Residual	9.745E11	44	2.215E10		
	Total	1.321E12	47			

a. Predictors: (Constant), ROA, DER, GROWTH

b. Dependent Variable: INTRINSIC VALUE

Source: Research Results

c. Test of Individual Parameters (t Test)

Based on Table 5.6 partially the results of the t-test statistic show the DER variable has a positive and significant effect with p-value $0.006 \ (< 0.05)$ on the firm value variable. Variable growth has a positive but not significant effect with a p-value of $0.327 \ (< 0.05)$ on the variable value of the company. ROA variable has a negative effect but not significant with a p-value of $0.982 \ (< 0.05)$ towards the variable value of the company.

Table 5.6 Partial Test (Test t) Second Substructure

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Mode	I	В	Std. Error	Beta	t	Sig.
1	(Constant)	-46252.669	51757.937		894	.376
	DER	109870.897	37887.402	.439	2.900	.006
	GROWTH	78298.754	79040.580	.151	.991	.327
	ROA	-8831.906	395734.858	003	022	.982

a. Dependent Variable: INTRINSIC VALUE

Source: Research Results

Discussion

Discussion of the First Substructure Hypothesis

a. Effect of Debt to Equity Ratio on Profitability

The testing of the first hypothesis in this study is to test whether the capital structure has a positive and significant effect on profitability on property, real estate & construction companies listed on the IDX.

The regression results of the first substructure model show the DER variable negative and significant effect (0.05 < 0.05) on profitability with a regression coefficient of -0.414.

The existence of negative and significant influence between DER on profitability means that the higher the DER indicates the greater the company's burden on outsiders, this is very possible to reduce the company's performance, because the level of dependence on outsiders is higher. If DER increases, ROA will decrease or vice versa. This is because if the debt ratio rises, the interest rate will also increase, this will reduce the profits obtained by the company. The higher DER indicates the higher use of obligations as a source of corporate funding. This can lead to a considerable risk for the company when the company is unable to pay these obligations at maturity. So that it will disrupt the continuity of the company's operations. In addition, the company will be faced with high interest costs so that it can reduce company profits.

However, based on the trade-off theory proposed by Modigliani-Miller (MM) assuming the existence of a tax on corporate earnings, the use of debt (leverage) will increase the value of the company because the interest cost of debt is a cost that reduces tax payments (a tax deductible expense). That is, the company will use more debt to get greater profits.

The capital structure has a negative and significant effect on profitability. This indicates that the greater the value of the capital structure ratio, the more debt that must be paid by the company which affects profit or profitability.

b. Effect of Growth on Profitability

Testing the second hypothesis in this study is to test whether Growth has a positive and significant effect on Profitability. The regression results of the first substructure model show that Growth variables have a negative and significant effect (0.004 < 0.05) on profitability with a regression coefficient of -0.0426.

This shows that the greater sales growth will reduce the company's profits. This indicates the company has increased assets and increased costs such as salary costs, wages and employee benefits, raw material costs,

marketing costs and advertising and the depreciation of the rupiah exchange rate caused by increased inflation so that the expected increase in profitability cannot be achieved due to growth sales cannot cover the costs incurred by the company.

The results of this study are consistent with the research conducted by Nurul (2016) which states that Non Performing Loans have a negative and significant effect on Return On Equity which is proxied by Current Ratio (CR) in Banking companies listed on the Indonesia Stock Exchange 2007-2014.

Discussion of the Second Substructure Hypothesis

a. Effect of DER on the Intrinsic Value of the Company

The testing of the third hypothesis in this study is to test whether the DER has a positive and significant effect on the Company's Intrinsic Value. The regression results of the second substructure model show that the DER variable has a positive and significant effect (0.05 < 0.05) on profitability with a regression coefficient of 0.439.

The existence of a positive influence on company value means that the higher the value of DER can significantly increase the value of the company. Because the company's goal to maximize company value can be achieved by implementing management functions. One of the decisions that must be taken to maximize the value of the company is a funding decision, where the company will determine the best capital structure to achieve company goals. The amount of use of external and internal funds will affect the value of the company. The results of this study are in line with Sri Hermuningsih (2013) which states that the capital structure represented by Debt to Equity Ratio (DER) has a positive and significant effect on the intrinsic value of the company. The policy of adding debt has a positive impact on the company, the existence of debt can help to control the use of free and excessive cash funds by management. This increase in control in turn can increase the value of the company as reflected in the increase in stock prices.

b. Effect of Growth on the Intrinsic Value of the Company

Testing the fourth hypothesis in this study is to test whether Growth has a positive and significant influence on the intrinsic value of the company. The regression results of the second substructure model show that the Growth variable has a positive and not significant effect (0.327 > 0.05) on the intrinsic value of the company with a regression coefficient of 0.151.

From the results of statistical tests show that the Growth variable has a positive and not significant effect on the intrinsic value of the company. Increasing sales growth does not significantly increase the company's value. This proves that if sales and profits increase, payments with debt and fixed expenses will increase the income of shareholders increasing the volume of sales, not the basis for adding debt. Future sales growth is a measure of the extent to which a company's earnings per share can be increased. Companies that have good sales growth rates will increase company value because this reflects optimal company performance. With the increase in the value of the company, the debtor will feel safe to provide long-term debt, so the company will easily get additional and in the form of long-term debt.

The results of this study are in line with Pantow, Murni and Trang (2015) who say that sales growth has a positive and insignificant effect on firm value. This shows that the increase in sales growth does not significantly increase the company's value.

c. Effect of Profitability on Intrinsic Value of the Company

Testing the fifth hypothesis in this study is to test whether profitability has a positive and significant effect on the intrinsic value of the company. The regression results of the second substructure model show the ROA variable has a negative effect but not significant (0.982 > 0.05) on the intrinsic value of the company with a regression coefficient of -0.003.

Profitability has a negative effect on company value. This shows that the greater the company's profit, the lower the company's value. The increase in profits does not affect the capital structure ratio, so that when the addition of debt followed by an increase in profits cannot cover the costs incurred by the company after the addition of asset costs such as wages, artisan salaries, asset operating costs and increases in imported raw materials.

V. Conclusion and Suggestion

5.1 Conclusion

Based on the results of the research described, conclusions can be made as follows:

- 1. DER has a negative and significant effect (0.05 < 0.05) on profitability with a regression coefficient of -0.414.
- 2. Growth has a negative and significant effect (0.004 < 0.05) on profitability with a regression coefficient of -0.0426.
- 3. DER has a positive and significant effect (0.05 < 0.05) on profitability with a regression coefficient of 0.439.

- 4. Growth has a positive and not significant effect (0.327 > 0.05) on the intrinsic value of a company with a regression coefficient of 0.151.
- 5. ROA has a negative effect not significant (0.982 > 0.05) on the intrinsic value of the company with a regression coefficient of -0.003.
- 6. DER has an indirect negative effect on the intrinsic value of the company through profitability as an intervening variable with a regression coefficient of -0.182.
- 7. Growth has an indirect effect on the intrinsic value of the company through profitability as an intervening variable with a regression coefficient of 0.064.

5.2 Suggestion

The suggestions that can be given based on the results of this study are as follows:

1. For Appraisers

Business assessors are advised to explore their capabilities in assessing the equity intrinsic of the company by using the income approach and discounted cash flow (DCF) method in providing opinion values because theoretically the approach and method are considered to have advantages in producing more accurate values which have calculated time value and money (time value of money) in the assessment process.

2. For Companies

Companies in the property sector are expected to be able to make risks in the capital structure as a measure of management in managing the capital structure, productivity and efficiency of all types of assets, and companies in the property sector are also expected to increase company assets and manage them maximally so as to increase corporate value.

3. For Investors

For investors, it is better if they make a decision to invest in a company that has gone public, it is suggested not only to pay attention to the high market price of shares of a company on the Indonesian stock exchange, but should pay attention to the intrinsic (fair value) variable of the company, given the prices listed on the stock formed on the factor of supply and demand so that tends to be influenced by speculators who expect that the company is worthy of being used as an investment vehicle, while the intrinsic value of the company better reflects the prospects of company performance which is based on expectations of cash flow received in the future by considering the risk which is reflected in the cost of capital.

4. For Further Researchers

Further research is expected to add other variables such as company size, dividend policy, managerial ownership, and other variables that are thought to influence the intrinsic value of the company. As well as further researchers can add sample data in previous years as the object under study.

Reference

- [1]. Brigham F. Eugene and Houston, Joel. (2010). Dasar-Dasar Manajemen Keuangan: Assetials of Financial Management. Jakarta: Salemba Empat.
- [2]. Hamidy, Wiksuana and Artini. (2015). Pengaruh Struktur Modal terhadap Nilai Perusahaan dengan Profitabilitas sebagai Variabel Intervening pada Perusahaan Properti dan Real Estate di Bursa Efek Indonesia. E-Jurnal Ekonomi dan Bisnis Universitas Udayana 4.10 (2015):665-682.
- [3]. Hermuningsih, Sri. (2013). Pengaruh Profitabilitas, Growth Opportunity, Struktur Modal terhadap Nilai Perusahaan pada Perusahaan Publik di Indonesia. Jurnal. Yogyakarta: Buletin Ekonomi dan Moneter dan Perbankan.
- [4]. Kusumajaya, Dewa Kadek Oka. (2011). Pengaruh Struktur Modal dan Pertumbuhan Perusahaan terhadap Profitabilitas dan Nilai Perusahaan pada Perusahaan Manufaktur di Bursa Efek Indonesia. Tesis. Universitas Udayana, Denpasar.
- [5]. Nurul. (2016). Pantow, Murni and Trang. (2015). Analisa Pertumbuhan Penjualan, Ukuran Perusahaan, Return on Asset dan Struktur Modal terhadap Nilai Perusahaan yang Tercatat di Indeks LQ 45. Jurnal EMBA Vol. 3, No. 1.
- [6]. Sugiyono. (2004). Metode Penelitian. Bandung.
- [7]. Zuliani, Selly. (2014). Pengaruh Profitabilitas, Pertumbuhan Penjualan, Struktur Aset dan Tingkat Pertumbuhan terhadap Sturktur Modal. Jurnal Ilmu & Riset Akuntansi Vol 3 No. 7.

Siti Astari Luthfi. "Effect of Capital Structure and Sales Growth on Intrinsic Value of Companies with Profitability as Intervening Variables in Property, Real Estate and Construction Companies." IOSR Journal of Business and Management (IOSR-JBM), Vol. 21, No. 8, 2019, pp. -.67-74