

# Comparison of Determinants of Capital Structure in Lippo Group and Bakrie Group Companies Listed on the Indonesia Stock Exchange (Partial Adjustment Model Approach)

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## ABSTRACT

This study aims to determine the determinants of the capital structure of the Lippo Group and the Bakrie Group listed on the Indonesia Stock Exchange using the partial adjustment model approach. The population in the Lippo Group company is 12 and the population at the Bakrie Group company is 9. The sample of this study is that all companies listed on the Indonesia Stock Exchange are 21 companies. Data analysis used panel data regression method with partial adjustment model approach. The results of the research in the t test at the Lippo Group company show that the lag leverage has a positive and insignificant effect on leverage, profitability has a positive and significant effect on leverage, company size has a positive and insignificant effect on leverage, earning volatility has a positive and significant effect on leverage, assets tangibility has a positive and significant effect on leverage and growth opportunity has a positive and insignificant effect on leverage. The results of the research in the t test at the Bakrie Group company show that the lag leverage has a positive and insignificant effect on leverage, profitability has a positive and insignificant effect on leverage, company size has a positive and insignificant effect on leverage, earning volatility has a positive and insignificant effect on leverage, assets tangibility has a negative and insignificant effect on leverage, growth opportunity has a negative and insignificant effect on leverage. The partial adjustment model test results show that only Lippo Group

company on the variables of profitability, earning volatility and assets tangibility have a significant positive effect on leverage. The results of the comparison of the optimal capital structure show that the Bakrie Group has a higher level of optimal capital structure by 83% than the Lippo Group at 55%.

**Keywords:** Lag Leverage, Profitability, Company Size, Earning Volatility, Assets Tangibility, Growth Opportunity, Leverage

## INTRODUCTION

Every company that is founded basically always strives to achieve the goals set by the company, both short-term and long-term goals. The purpose of establishing a company is to make a profit, increase sales, maximize share value and improve shareholder welfare. To achieve these goals, one of the companies must pay attention to matters relating to corporate funding issues.

In principle, every company needs funds for business development. Fulfillment of these funds comes from internal sources or external sources. Financial managers, while still paying attention to the cost of capital (COC), need to determine the capital structure in an effort to determine whether the company's fund needs are met with their own capital or foreign capital. In making funding decisions, companies also need to consider and analyze a combination of

sources of economic funds in order to finance their investment needs and business activities. As stated by Brigham and Houston (2011) policies regarding capital structure involve a trade off between risk and rate of return.

The need for capital is very important for a company to operate and also develop its operations. Capital is the right or part of the company which is shown in the capital account, surplus and retained profit, or the excess value of assets owned by the company against all its debts (Munawir, 2004). The use of each source of capital requires costs, so the company must determine the source of capital that minimizes costs and determines the capital structure the company uses, whether it is based on the cost and benefit between the cost of capital and the benefits of using debt according to trade-off theory (Novita, 2012).

Companies that want to have a good capital structure can use the optimal capital structure concept. According to Brigham and Houston (2011) the optimal capital structure is a structure that maximizes firm value. It is further explained that the capital structure that maximizes firm value is a structure that minimizes the weighted average cost of capital (WACC). Weighted average cost of capital (WACC) can be minimized by making the right funding decisions. The right funding decision is related to choosing the source of funds, by compiling the right mix of capital between debt and company equity can minimize the cost of capital so that it will increase the value of the company.

Capital structure is the main focus for companies because the good and bad of the capital structure can affect the company's financial condition (Riyanto, 2008). If the capital structure used comes from external funding, namely large debt, it will increase the risk of default in the future. Too much debt will hinder the development of the company which will also make shareholders think twice about investing their capital (Kasmir, 2010). A capital

structure that maximizes company value or share price is the best capital structure.

Issuers who are members of large business conglomerates such as the Astra Group, Salim Group, Lippo Group, Bakrie Group, MNC Group, Rajawali Group, and Sinarmas Group have reported their third quarter 2017 finances. Among the 6 companies, 3 had the best financial performance and the rest were the worst, namely Lippo Group, Bakrie Group, Rajawali Group and MNC Group. They failed to record good performance during the January-September 2017. Their subsidiary failed to record positive profit growth. In fact, there were some who actually lost money in this period. Of the four companies that have the largest number of subsidiaries listed on the Indonesian stock exchange, they are the Lippo Group and the Bakrie Group. And the traces of the company's years of existence are older than other conglomerate companies.

There are many factors that influence managers' decisions in choosing the company's capital structure. Some of the main factors that affect a company's capital structure are the interest rate, the stability of income, the composition of assets, the risk level of assets, the amount of capital required, the state of the capital market, the nature of management, and the size of a company (Riyanto, 2008). Business risk, tax position, financial flexibility and conservatism or management aggressiveness are factors that influence capital structure decisions, particularly on the targeted capital structure. In general, the factors that influence the choice of capital structure are: sales stability, asset structure, operating leverage, growth rate, profitability, taxes, control, management attitudes, attitudes of lenders and rating agents, market conditions, internal company conditions and flexibility finance (Brigham and Houston, 2006). Capital structure is influenced by long-term viability, management conservatism, supervision, asset structure, business risk, growth rates,

taxes, reserve loan capacity and profitability (Atmaja, 2008).

The trade off theory in Brealey and Myers (2003) states that the higher the profitability, the higher the equity proportion or the decreasing loan proportion. Large companies generally tend to have a large proportion of loans, so the negative correlation between profitability and the level of leverage in the company is getting stronger. Companies also face restrictions on the use of retained earnings and a strict dividend policy. Therefore, if there is a decrease in profit, the company will tend to cover its funding needs by adding loans from outside (Nuswandari, 2013), so that the company will increase its debt to a certain extent to increase company value.

This study aims to determine the determinants of the capital structure of the Lippo Group and the Bakrie Group listed on the Indonesia Stock Exchange using the partial adjustment model approach.

## **RESEARCH METHODS**

The author uses this type of associative research, which is research that aims to determine the effect or relationship between two or more variables. This research has the highest level compared to descriptive and comparative because this research can build a theory that can function to explain, predict and control a symptom (Sugiyono, 2003:14)

This research is quantitative because it obtains data in the form of numbers or qualitative data which are extrapolated. So this type of research is quantitative associative.

The population in the Lippo Group company is 12 and the population at the Bakrie Group company is 9. The sample of this study is that all companies listed on the Indonesia Stock Exchange are 21 companies.

Data analysis used panel data regression method with partial adjustment model approach.

## **RESULT**

### **Description of Research Object**

#### **Lippo Group Company**

Lippo Group is a large company in Indonesia founded by Mochtar Riady. This group started a business with Bank Lippo, which has changed its name and changed its share position to Bank CIMB Niaga. This company then developed itself in the property business which then developed in Indonesia, China and several other countries. Apart from the property business, he also develops retail, telecommunications and various other types of businesses. Established the Lippo Bank company in 1948 and created the Lippo Group in 1950. Currently, the company is led by James Riady, a subsidiary of Mochtar Riady. In 2016, the company started planning a new city, namely Meikarta. The city is located in Cikarang, and is expected to be completed in 2021. Engaged in the property sector including satellite cities, housing, condominiums, class A offices, education, industrial centers, shopping centers, hotels, golf and hospitals. Some of the property businesses in Indonesia that are widely known to the public include Lippo Karawaci, Lippo Cikarang, Rolling Hills Lipo Karawaci, and Rolling Hills Karawang. Apart from Indonesia, Lippo also has similar properties in China and Singapore. In the retail business, Lippo controls several businesses such as Matahari Putra Prima including Foodmart, Matahari Dept. Store, Hypermart, and health and beauty products. Lippo also has businesses in the media, telecommunications, information technology and cable TV sectors. In the financial sector, Lippo has businesses such as banking, insurance and others with a focus on Asia.

#### **Bakrie Group Company**

The Bakrie Group company was founded in 1942 by Achmad Bakrie. Previously the owner founded CV Bakrie & Brothers in Teluk Betung in 1940. The company is engaged in many fields such as mining, oil and gas, property, infrastructure,

media and telecommunications. And in 1989 it was listed on the Indonesia Stock Exchange. Bakrie Group's business activities have grown to include general trading, construction services, agribusiness, coal mining, oil & gas and telecommunications; while continuing to develop manufacturing fields that began in

the 50's such as steel pipes, building materials and automotive components. The Company also participates in strategic infrastructure development efforts in the energy and transportation sector. This business diversification has opened opportunities for the Company to contribute to national development.

Table 1: t Test Statistic (Lippo Group)

| Dependent Variable: Y?                 |             |                       |             |        |
|--|-------------|-----------------------|-------------|--------|
| Method: Pooled Least Squares           |             |                       |             |        |
| Date: 10/29/20 Time: 10:18             |             |                       |             |        |
| Sample: 2016 2019                      |             |                       |             |        |
| Included observations: 4               |             |                       |             |        |
| Cross-sections included: 12            |             |                       |             |        |
| Total pool (balanced) observations: 48 |             |                       |             |        |
| Variable                               | Coefficient | Std. Error            | t-Statistic | Prob.  |
| X1?                                    | 0.452029    | 1.806394              | 0.250238    | 0.8037 |
| X2?                                    | 1.262075    | 0.365075              | 3.457028    | 0.0013 |
| X3?                                    | 0.009882    | 0.009804              | 1.007996    | 0.3194 |
| X4?                                    | 1.314117    | 0.533377              | 2.463768    | 0.0180 |
| X5?                                    | 0.796598    | 0.218382              | 3.647722    | 0.0007 |
| X6?                                    | 0.065316    | 0.047248              | 1.382403    | 0.1743 |
| C                                      | -0.706957   | 0.260226              | -2.716709   | 0.0096 |
| R-squared                              | 0.485058    | Mean dependent var    | -0.140190   |        |
| Adjusted R-squared                     | 0.409701    | S.D. dependent var    | 1.063853    |        |
| S.E. of regression                     | 0.817368    | Akaike info criterion | 2.568583    |        |
| Sum squared resid                      | 27.39171    | Schwarz criterion     | 2.841487    |        |
| Log likelihood                         | -54.64599   | Hannan-Quinn criter.  | 2.671706    |        |
| F-statistic                            | 6.436770    | Durbin-Watson stat    | 2.473046    |        |
| Prob(F-statistic)                      | 0.000077    |                       |             |        |

$$Y = -0.70 + 0.45X_1 + 1.26X_2 + 0.009X_3 + 1.31X_4 + 0.79X_5 + 0.065X_6$$

With the adjustment coefficient =  $1 - 0.45 = 0.55$

The results of the research in the t test at the Lippo Group company show that the lag leverage ( $X_1$ ) has a positive and insignificant effect on leverage, profitability

( $X_2$ ) has a positive and significant effect on leverage, company size ( $X_3$ ) has a positive and insignificant effect on leverage, earning volatility ( $X_4$ ) has a positive and significant effect on leverage, assets tangibility ( $X_5$ ) has a positive and significant effect on leverage and growth opportunity ( $X_6$ ) has a positive and insignificant effect on leverage.

Table 2: t Test Statistic (Bakrie Group)

| Dependent Variable: Y?                 |             |                       |             |        |
|--|-------------|-----------------------|-------------|--------|
| Method: Pooled Least Squares           |             |                       |             |        |
| Date: 10/29/20 Time: 10:49             |             |                       |             |        |
| Sample: 2016 2019                      |             |                       |             |        |
| Included observations: 4               |             |                       |             |        |
| Cross-sections included: 7             |             |                       |             |        |
| Total pool (balanced) observations: 28 |             |                       |             |        |
| Variable                               | Coefficient | Std. Error            | t-Statistic | Prob.  |
| X1?                                    | 0.171604    | 0.089038              | 1.927315    | 0.0731 |
| X2?                                    | 0.404693    | 0.466032              | 0.869023    | 0.3985 |
| X3?                                    | 0.046656    | 0.031529              | 1.489294    | 0.1571 |
| X4?                                    | 0.420997    | 0.309497              | 1.360262    | 0.1938 |
| X5?                                    | -0.038329   | 0.121549              | -0.315336   | 0.7569 |
| X6?                                    | -0.000543   | 0.000883              | -0.614725   | 0.5479 |
| C                                      | -0.989035   | 0.741415              | -1.333982   | 0.2021 |
| Fixed Effects (Cross)                  |             |                       |             |        |
| -1-C                                   | -0.465370   |                       |             |        |
| -2-C                                   | 0.464828    |                       |             |        |
| -3-C                                   | -1.039123   |                       |             |        |
| -4-C                                   | 0.315323    |                       |             |        |
| -5-C                                   | 0.519970    |                       |             |        |
| -6-C                                   | 0.540668    |                       |             |        |
| -7-C                                   | -0.336297   |                       |             |        |
| Effects Specification                  |             |                       |             |        |
| Cross-section fixed (dummy variables)  |             |                       |             |        |
| R-squared                              | 0.679647    | Mean dependent var    | 0.205896    |        |
| Adjusted R-squared                     | 0.423364    | S.D. dependent var    | 0.860026    |        |
| S.E. of regression                     | 0.653074    | Akaike info criterion | 2.290165    |        |
| Sum squared resid                      | 6.397587    | Schwarz criterion     | 2.908688    |        |
| Log likelihood                         | -19.06231   | Hannan-Quinn criter.  | 2.479254    |        |
| F-statistic                            | 2.651941    | Durbin-Watson stat    | 2.831129    |        |
| Prob(F-statistic)                      | 0.038691    |                       |             |        |

$$Y = -0.98 + 0.17X_1 + 0.40X_2 + 0.04X_3 + 0.42X_4 - 0.03X_5 - 0.0005X_6$$

With the adjustment coefficient =  $1 - 0.17 = 0.83$

The results of the research in the t test at the Bakrie Group company show that the lag leverage ( $X_1$ ) has a positive and insignificant effect on leverage, profitability ( $X_2$ ) has a positive and insignificant effect on leverage, company size ( $X_3$ ) has a positive and insignificant effect on leverage, earning volatility ( $X_4$ ) has a positive and insignificant effect on leverage, assets tangibility ( $X_5$ ) has a negative and insignificant effect on leverage, growth opportunity ( $X_6$ ) has a negative and insignificant effect on leverage.

The partial adjustment model test results show that only Lippo Group company on the variables of profitability, earning volatility and assets tangibility have a significant positive effect on leverage.

The results of the comparison of the optimal capital structure show that the Bakrie Group has a higher level of optimal capital structure by 83% than the Lippo Group at 55%.

## CONCLUSION AND SUGGESTION

### CONCLUSION

The results of the research in the t test at the Lippo Group company show that the lag leverage has a positive and insignificant effect on leverage, profitability has a positive and significant effect on leverage, company size has a positive and insignificant effect on leverage, earning volatility has a positive and significant effect on leverage, assets tangibility has a positive and significant effect on leverage and growth opportunity has a positive and insignificant effect on leverage.

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The partial adjustment model test results show that only Lippo Group company on the variables of profitability, earning volatility and assets tangibility have a significant positive effect on leverage.

The results of the comparison of the optimal capital structure show that the Bakrie Group has a higher level of optimal capital structure by 83% than the Lippo Group at 55%.

### Suggestion

The suggestions in this study:

1. For Lippo Group and Bakrie Group company to add or register other companies on the Indonesian Stock Exchange. Because in addition to the next researchers, the data are more varied and get significant results.
2. For potential investors, the highest level of capital structure adjustment lies with the Bakrie Group company. Therefore, investing in Bakrie Group company is highly recommended.
3. For academics, which is to learn more about the partial adjustment model because this study has a very broad scope.
4. For further researchers, research is required to use research data not only on Lippo Group and Bakrie Group company, but also other conglomerate group company (non-corporate sector), so that the research results are more significant.

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