SPEED OF ADJUSTMENT CAPITAL STRUCTURE (STUDY ON NON-FINANCIAL COMPANY LISTED ON INDONESIA STOCK EXCHANGE PERIOD 2006-2016)

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Abstract

The aim of this study is to analyze the effect of company size variables, asset growth, asset structure and business risk against capital structure adjustment speed with dynamic approach. The number of samples in this study was 63 companies by using purposive sampling method. Multiple regression method with fixed effect model was used as data analysis in this study. The results of this study indicate that company size and asset structure have positive significant effect on capital structure adjustment speed, whereas asset growth has significant negative effect on capital structure adjustment speed and business risk does not have significant effect on capital structure adjustment speed.

Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh variabel ukuran perusahaan, pertumbuhan aset, struktur aset dan risiko bisnis terhadap kecepatan penyesuaian struktur modal dengan pendekatan dinamis. Jumlah sampel yang digunakan adalah 63 perusahaan dengan metode purposive sampling. Analisis yang digunakan pada penelitian ini adalah metode regresi berganda dengan model fixed effect. Hasil penelitian ini menunjukan bahwa ukuran perusahaan dan struktur aset positif signifikan mempengaruhi kecepatan penyesuaian struktur modal, sedangkan pertumbuhan aset negatif signifikan terhadap kecepatan penyesuaian struktur modal dan risiko bisnis tidak signifikan mempengaruhi terhadap kecepatan penyesuaian struktur modal.
INTRODUCTION

The capital structure is widely researched as a variable in modern financial theory. Many of these capital structure theories support the explanation of the various levels of debt used as capital in a company. According to Astuti (2014), the capital structure of the company consists of own capital (equity) and debt (leverage). Capital structure can be an important issue for a company (Putri, 2012; Wahyuni, 2013). In carrying out its operation, the company put capital as an important element (Sari et al., 2012; Utomo, 2013).

The capital structure used in a company as a source of funding also varies (Yulianto, 2013). The amount of funds required each company is not the same adjusted to the condition of the company or the size of the company. If the company in the fulfillment of its capital needs is increasing while the funds owned are limited, then the company has no choice but to use funds from outside, whether in the form of debt or bonds (Widodo & Djawahir, 2014; Nugroho, 2014). Therefore, the company must adjust the optimal debt level (Yulianto et al., 2015).

The current trade-off theory has undergone many developments that only discussed bankruptcy cost and tax deductible (Kraus & Litzenberger, 1973), transformed into optimal capital structure. The optimal capital structure is the company’s capital structure that will maximize the company's stock price (Putri, 2012). In the research of Fischer et al. (1989) states that the optimal capital structure is dynamic and changing in a certain range. So it can be concluded that changes in the company’s capital structure will always be done by the company so that the capital structure selected by the company is always at the optimal point.

While in the static trade-off theory assumes that the capital structure of the company is the result of trade-off of tax advantages by using debt and expenses arising from the use of the debt. The static trade-off theory is not wrong, but it has limitations because it only examines the variables that affect debt (Fuady, 2013). Although the trade-off theory model can not precisely determine the optimal capital structure but the model makes an important contribution: (1) firms with high assets should use less debt; (2) companies that pay higher taxes should use more debt than low paying firms.

In Table 1 can be seen that the ratio of determinant variable on the capital structure of non-financial companies listed on the Indonesia Stock Exchange period 2006-2016 showed a fluctuating trend. Fluctuation is an unstable condition that is not constant and always changing. In the variable size of the company (Size) in 2006-2008 experienced a considerable increase, the increase in firm size should be followed by an increase in the speed of adjustment (Speed) close to 1 as described in dynamic capital structure theory but vice versa in the Table above the speed value adjustments decreased from 2006-2008. Companies listed on the IDX have fluctuating asset

<table>
<thead>
<tr>
<th>Year</th>
<th>Variabel</th>
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<th>Variabel</th>
<th>Variabel</th>
<th>Variabel</th>
</tr>
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<td>3.929</td>
<td>.622</td>
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<tr>
<td>2015</td>
<td>14.887</td>
<td>.098</td>
<td>.329</td>
<td>4.390</td>
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</tbody>
</table>
growth rates. In 2013-2016 asset growth experiences a downward trend but at the rate of speed adjustment (Speed) also decreased, should be in accordance with dynamic capital structure theory of growth that decreased will cause an increase in the value of speed adjustment (Speed).

In asset structure variable (Tang) also fluctuate. In the Table shows the value of asset structure in 2012-2013 has decreased, while the value of the speed adjustment (Speed) to obtain results that experience upsurge. This is contrary to the dynamic capital structure theory. Another variable that is business risk (Risk), in the Table can be seen business risks rising in 2011-2012 increased, as well as the value of adjustment speed also experience upsurge in that year. The results on business risk variables conflict with capital structure theory which states that business risk has a negative correlation with speed adjustment (Speed). The condition of determinant variable of fluctuating capital structure in the graph above has an effect on determining optimal capital structure. With the optimal capital structure, it is expected that the company can be better able to make adjustments to the speed of changes in capital structure.

According Heshmati (2001) suspect that firms that use higher leverage costs have lower optimum debt compared to companies with low leverage costs. Proposed a model of dynamic capital structure. The theory predicts that firms can systematically deviate from leverage targets, although their capital structure choices are in line with trade-off theory (Fischer et al., 1989).

According to Hovakimian et al. (2001) dynamic trade-off theory is a compromise version of the trade-offs of theory and pecking order theory. In theory, this suggests that the firm’s leverage ratio can deviate from the target in a few moments when the distance is large enough, the manager shifts it back toward the target.

Speed of Adjustment on the company’s capital structure which can be interpreted as the velocity of capital structure rotation, influenced by several factors. One of the important factors affecting Speed of Adjustment is the optimal capital structure. Therefore, the main purpose of this research is to estimate the dynamics of capital structure adjustment with optimal capital structure. It is also to prove that the actual leverage level of the company has different frequency compared to optimal leverage target. This is the reason why it is important to use dynamic model in studying capital structure.

There are several studies that use a dynamic model approach in studying capital structure as has been done in several studies. Fischer et al. (1989) examines the model that determines the scope of deviations in the firm’s capital structure over time. Jalivand and Harris (1984) examine the characteristics of corporate financial behavior as part of a long-term target adjustment. The main purpose of this research is to know the influence of determinant of capital structure of optimal capital there is speed of adjustment of company capital structure. Banerjee et al. (2004) analyzed the dynamic capital structure of firms in the United States and Britain with flexible adjustment parameters.

Research on the determinants of the speed of changes in capital structure has not been widely studied in Indonesia. Therefore, in this study, researchers will examine the effects of several variables of the firm’s capital structure (firm size, asset structure, firm growth and business risk) that have been used in some previous studies (Hovakimian et al., 2001; Heshmati, 2001; Drobetz & Wanzemried, 2006; Said, 2012) to the speed of changes in the company’s capital structure in Indonesia.

Of the various companies listed in the Indonesia Stock Exchange, non-financial sector companies are companies that have a capital structure that has a more flexible funding composition in the selection of debt and capital on capital structure decisions and is not bound by regulations from Bank Indonesia regarding minimum capital provision. While in the financial companies, especially banks, the problem of capital structure is regulated in Bank Indonesia regulations. So the use of debt to banks is limited.

The existence of gaps from the theory and inconsistency of previous research results in testing In addition, the object of this study using a non-financial company listed on the Indonesia Stock Exchange period 2006-2016. This research uses E-view 9 software with panel data procedure.

This study aims to test the speed of capital structure settlement in Non-Finance companies listed on the Indonesia Stock Exchange period 2006-2016.

**Hypothesis Development**

**Dynamic Capital Structure**

Theories used in analyzing capital structure can be divided into two categories: those included in the first category are the trade-off theory (Baker & Wurgler, 2002a; Kraus & Litzenberger, 1973), agency theory (Jensen & Meckling, 1976) and the theory of cash flow free (Jensen, 1986) which provides a statement with the optimal
debt level (target leverage). The second category includes pecking order theory (Myers & Majluf, 1984) and the equity market time theory (Baker & Wurgler, 2002a) which do not suggest optimal debt levels in capital structure theory. Theories included in both categories are usually used as static or dynamic frameworks. But in the second category do not use the optimal level of debt in a dynamic framework. In the second category only describes factors related to the cost of selection (pecking order theory) or mispricing of common stock (time theory).

The main difference in dynamic theories in both categories is that in the first category dynamic factors in theory gradually move and can be observed in the debts that enter in the factor of optimal debt level. While in the second category of debt factor can be observed with factors that support the debt ratio. In the theory of capital structure, all theories complement each other and not replace other theories (Myers & Majluf, 1984).

According to Darminto and Manurung (2008) the theory of dynamic capital structure is a refinement of the weaknesses that exist in the static model that is in the static model to forget the optimal restructuring of capital structure to respond to fluctuations in asset value over time. This means the company will always try to adjust the level of leverage to the optimal direction. Thus, there is movement of leverage level over time toward a target to be achieved by the company. However, this leverage target cannot be observed (unobservable) in practice in the company, which can be observed is the direction and speed of adjustment (Speed of Adjustment).

According to Elsas and Florysiak (2011) the theory of dynamic capital structure provides a prediction that corporate leverage can systematically deviate from the target, even though its voters have followed the trade-off theory. Adjustment costs include transaction costs for securities issuance and opportunity costs because they deviate from the target. In an environment without friction, companies can instantly adjust capital structure to the desired target without any transaction costs and other benefits. Capital structure theory cannot espouse the observed debt ratio, but instead explains the different optimal leverage in each company (Heshmati, 2001). Information about leverage and Speed of Adjustment is one of the materials that can be used by creditors in considering whether to lend the funds to a company or not that can be seen from how big the company has long-term debt or leverage because the higher the amount of leverage owned, the more at risk the company is not able to pay the debt burden and the principal of the debt. As for investors leverage information and Speed of Adjustment shows how big a company’s risk in terms of the inability of companies pay dividends to investors (Citro, 2014).

According to Graham and Harvey (2001) the characteristics of the company into factors that can determine the dynamic capital structure. Companies that tend to use debt in funding have optimal debt ratio targets. In fact, if the company uses a lot of debt in its capital source, then the company is at risk of experiencing financial distress.

**Speed of Adjustment**

Speed of Adjustment According to Dewi and Ramli (2016) Speed of Adjustment is the speed of adjustment to the optimal capital structure, this is determined by the cost of having one capital structure to another capital structure. Citro (2014) also states that Speed of Adjustment is the speed of a company in meeting its leverage targets, in accordance with the dynamic trade-off theory which states that the company regularly adjusts from time to time to its optimum capital structure. The dynamic capital structure reflects the optimal level as well as the cost of deviations from leverage and adjustment costs towards optimal leverage (Flannery & Hankins, 2013). Speed of Adjustment (Speed of Adjustment) is a function of a number of variables that affect the cost of debt level determined by the distance between the actual debt level and the optimal debt level (Dewi & Ramli, 2016).

**Firm Size**

According to Bouallegui (2006) Firm size is the size of a company that can be measured using the total assets of the company. Firm size describes the size of a company that can be seen from the total assets owned by the company (Haryanto, 2016). However, according to Dewi and Ramli (2016) the size of the company describes the size of the company related to the prospect of the company in the future by looking at the total assets and the level of sales owned by the company that can give a signal to shareholders that the total assets or a large sales level will have good prospects. So it can be concluded that the size of the company is the size of a company that can be calculated by looking at the total assets and level of sales at the company.

**Assets Growth**

Assets Growth is the growth of a company that maintains its business position through sa-
les (Mazur, 2007). According to Maftukhah (2013) Assets Growth shows the assets used for operational activities within a company. Meanwhile, according to Weston and Copeland (1995), Assets Growth can be defined as an increase that occurs in a company. Thus Assets Growth is measured by total asset growth. With the growth of sales, then the capacity of the company should also be increased through additional investment in assets, so asset growth reflects the Growth of a company. Growth can be measured using a percentage change in total assets.

**Tangibility**

According to Riyanto (2008) tangibility is a balance or comparison both in terms of absolute and in terms of relative between current assets and fixed assets. Tangibility describes a portion of the total assets that can be used as collateral (Utomo, 2013). The analysis used to calculate how much assets of the company can be used as debt guarantees (Sofilda & Maryani, 2007). The Company’s assets structure describes the property or investment owned by the company (Oktavianie, 2011). So it can be concluded that the asset structure (Tangibility) can be measured using the ratio of total net fixed assets that can be used as debt guarantees, with total assets.

**Business Risk**

Business risk is the uncertainty in the expected future operating income of the company. Business risk represents the level of risk of non-debt corporate operations (Atmaja, 2008). According to Horne and Wachowicz (2005) Business risk can be interpreted in several ways. In the statistical approach, business risk is defined as the variability of operating profit or income before interest and taxes. Factors affecting the Business Risk are sales variability, operational cost variability and operating leverage.

**Development of Hypotheses**

The diversity of previous research makes research on the factors affecting the speed of adjustment of attractive capital structure to be studied. This study aims to analyze the effect of firm size, asset growth, asset structure and business risk on the speed of capital structure adjustment. For it is made hypothesis as follows:

H1: Companies in Indonesia have slow speed adjustments < 1.

H2: Company size has a significant positive effect on the speed of capital structure.

H3: Asset growth has a significant negative effect on capital structure adjustment speed.

H4: The asset structure has a significant positive effect on the speed of capital structure adjustment.

H5: Business risk has a significant negative effect on the speed of capital structure adjustment.

**METHOD**

This research is seen from the type of data is the type of explanatory research with quantitative approach that is scientific research where data obtained in the form of statistical numbers or codes that can be quantized. The data is in the form of variables and operationalization with a certain size scale, such as nominal scale, ordinal, interval and ratio (Sarwono, 2006). Design research used in this research is the design of causality, the research design used to examine the possibility of causal relationships between variables. The research design aims to find out how the effect of firm size, asset growth, asset structure and business risk on the speed of capital structure adjustment for non-financial companies listed on the BEI period 2006-2016.

The population in this study is a non-financial company listed on the Indonesia Stock Exchange in 2006-2011 which publishes complete financial statements. Non-Finance Companies in Indonesia 265 companies obtained a sample of 63 companies that meet the purposive sampling technique.

**Research Variable**

**Dependent Variables**

\[ L_t = (1 - \sigma_1) L_{t-1} + \sigma_2 (L^*) \]

**Independent Variables**

\[ \text{Size} = \ln (Sales) \]

**Definition of Research Variables**

**Dependent Variable**

\[ L_t \quad = \text{Speed of adjustment} \]

\[ L_{t-1} \quad = \text{Y variable value or Leverage in the previous year} \]

\[ L^* \quad = \text{Optimal leverage} \]

\[ \sigma_1, \sigma_2 \quad = \text{Regression coefficient} \]

**Independent Variables**

\[ \text{Size} \quad = \text{Firm Size} \]

\[ \ln \quad = \text{Natural Logarithm} \]

\[ \text{Growth} \quad = \text{Growth of assets} \]

\[ \text{Total Aktiva (t)} \quad = \text{Total assets of the current year} \]
Total Aktiva (t-1) = Total assets of the previous year
Tangibility = Asset Structure
Fixed Assets = Total fixed assets
Total Assets = Total assets of the company
Business risk = Risk of the company’s business
Standard deviation Operating profit = The standard deviation of the firm’s operating profit
Expected operating profit = Average operating profit
Business risk = Business risk of the company
Standard deviation Operating profit = Standard deviation Operating profit of the company
Expected operating profit = operating profit average

Method of collecting data
This research used documentation technique as data collection method which is collecting data in the form of financial statement ratios from financial statement and performance summary which included in the sample of this research.

Data analysis method
This research used Eviews-9 software to analyze the data, data analysis technique is describing the technique which used in this research is to analyze the data which had been collected including the test. Data analysis techniques used in this research were descriptive and inferential statistical techniques (Sanusi, 2011). Descriptive statistics are statistics used to provide an overview or description of the data collected in the study. In this case, the data presented in general Table through group explanation such as mean, mode and standard deviation (Ferdinand, 2014).

Selection of Panel Data Estimator Model
This study uses panel data analysis, which is combination between time-series data during 2006-2016 and Cross-section data including 63 companies. The data collected was processed by using data processing software e-views 9. Panel data which is used in this study was classified as unbalance panel because each subject (company) has different amount of observation (Gujarati & Porter, 2013). Common Effects, Fixed Effects Model LSDV and Random Effects.

Classic assumption test
According to Gujarati and Porter (2013) classical assumption test aims to ensure that the results of the study are valid with the data used theoretically is unbiased and consistent and also the regression coefficient appraisal is efficient.

Normality test
If the probability value < α and JB value > value of Chi-Square Table, then H0 denotes that the residual is normally distributed is rejected. If probability value > α and JB < value of Chi-Square Table, it can be concluded that residual is normally distributed is fulfilled (Ghozali, 2013).

Multicollinearity Test
According Ghozali and Ratmono (2013), multicollinearity test aims to test whether the regression model found has high or perfect correlation between independent variables.

Heteroscedasticity Test
Heteroskedasticity test is used to test whether in regression model there is variance inequality of residual from one observation to another observation (Ghozali, 2013).

Autocorrelation Test
According Ghozali (2013) autocorrelation test is used to determine whether in regression model there is a correlation between the confounding errors in t period to t-1 period (previously).

Partial Adjustment Model Test
Through formation of dynamic models such as PAM model, researcher will be able to calculate the value of optimal leverage and adjustment speed (Dewi & Ramli, 2016). Later, adjustment speed will be used as dependent variable which will be analyzed its effect against optimal leverage factors. The steps of finding optimal leverage variable and adjustment speed variable:

Finding Optimal Leverage
A way to find optimal leverage value is by using equation which is obtained from the results of regression with least square method (Dewi and Ramli, 2016). The equation is as follow:

\[ L^t = b_0 + \beta_1UP + \beta_2PA + \beta_3SA + \beta_5RB \]

Description:
- \( L^t \) = Optimal Leverage
- \( \beta_0 \) = Constants
- \( \beta_1, \beta_2, \beta_3, \beta_4 \) = Regression coefficients of each variables
- \( X_{1t} X_{2t} X_{3t} X_{4t} \) = Value of each independent variables
Dynamic Regression Analysis to Find Speed of Adjustment Value

After knowing optimal leverage value, the next step is to find regression coefficient value of optimal leverage (\(L^*t\)) and level of leverage on the previous year (\(L_{t-1}\)) by using dynamic regression analysis (Dewi & Ramli, 2016).

In the dynamic regression model, it can be seen that current value of dependent variable (\(Y_t\)) is not only affected by the current value of independent variable (\(X_t\)) but also the value of dependent variable and independent variable in the previous period and the discrepancy between the residuals (Ariefianto, 2012). The formulations as follow:

\[
L_t = a + \lambda_1 L^*t + \lambda_2 \text{LEV}(-1) + e
\]

If the dynamic regression analysis has been completed, the regression coefficient (\(\lambda\)) will be obtained from the optimal leverage (\(L^*t\)) and the level of leverage in the previous year (Level-1). The value of each regression coefficient (\(\lambda\)) will be inputted into an equation which will yield the adjustment speed value (Dewi & Ramli, 2016).

According to Drobetz and Wanzenried (2006) to facilitate analysis of adjustment speed value can be done by absolute \(L_t\) value, because positive or negative value does not give meaning to speed of capital structure changes. If result \(| L_t | = 1\), indicates that the adjustment is done quickly, the adjustment is done with the span of one period, so that debt ratio owned by the company is right on target leverage. Whereas, if \(| L_t | < 1\) then the company does not make adjustments optimally, so the company is not in the optimal capital structure. If the result shows \(| L_t | > 1\), these results show the company make more adjustments than necessary, because the company is not in the optimal level of debt ratio. The equation is as follow:

\[
L_t = (1- \lambda_1)\text{Lev}-1 + \lambda_2 (L^*t)
\]

Description:
- \(L_t\) = Speed of adjustment
- \(\text{Lev}-1\) = Value of variable Y or DER in Previous year
- \(L^*t\) = Optimal leverage
- \(\lambda_1, \lambda_2\) = Regression coefficient

Analysis of Panel Data Regression with Fixed Effect Approach

According to Gujarati and Porter (2013), the LSDV model introduces the heterogeneity (individuality or uniqueness) between subjects (companies) by giving each entity (year) its own intercept value. The term fixed effect is the intercepts which vary for each subject (company), but each year, does not change often, so that what is meant by time-invariant. Fixed Effect Model (FEM) with different intercepts for each company, using dummy variable techniques, specifically for derivative of dummy intercepts techniques, therefore the equations derived from LSDV as follows:

\[
\Delta \text{SPEED}it = \alpha_{it} + \beta_1 \text{UPit} + \beta_2 \text{PAit} + \beta_3 \text{SAit} + \beta_4 \text{RB}it + \epsilon_{it}
\]

Description:
- \(\alpha_{it}\) = Constants
- \(\beta_1\) = Koefisien Regresi UP, PA, SA, and RB
- \(\Delta \text{SPEED}it\) = Speed of Adjustment
- \(\epsilon_{it}\) = Error

Goodness of Fit Test

The accuracy of sample regression function in determining the actual value can be measured using its goodness of fit. Statistically, this analysis can be measured from the statistical value of \(F\), the determinant coefficient and \(R^2\) (Ghozali, 2013).

F-Statistic Test

According Ghozali (2013) states that the aim of F-Statistic test is to determine whether independent variables simultaneously affect the dependent variable. F test is used to determine whether the modeling made fulfill fit criteria or not, with the following steps:

Determination Coefficient Test (R2)

Coefficient determination is used to measure the proportion or percentage of the total variation on dependent variable which is described by the regression model (Gujarati & Porter, 2013).

According to Gujarati and Porter (2013) if the empirical test the adjusted R2 value is negative, then the adjusted value \(R^2\) is considered zero. Mathematically if the value of \(R^2 = 1\), then adjusted \(R^2 = R^2 = 1\). Whereas the value of \(R^2 = 0\), then adjusted \(R^2 = (1-k) / (n-k)\). If the value of \(k> 1\), then adjusted \(R^2\) will be negative.

Hypotheses Testing

The significance test is a procedure, in which the sample results are used to prove the truth or error of null hypothesis (Gujarati & Porter, 2013).
RESULTS AND DISCUSSION

The number of non-financial companies listed on BEI during the period 2006-2016 was 265 companies. The sample used was 63 companies. The data used in this study is financial statements including balance sheet and cash report.

According Ghozali (2011) the purpose of statistical descriptive analysis is to know the characteristics that exist in the data of a sample. Data of a sample which can be known through descriptive analysis such as minimum, maximum, mean value and also standard deviation from data used in the research.

Based on Table 2 adjustment speed variable which is proxied by adjustment speed, the lowest value is 0.188 issuer is PT. Lion Metal Works Tbk. The maximum value of SPEED is 3.456 the issuer is PT. Vivatex Wheel Tbk. Company size variable the minimum value is 10241 the issuer is PT. Kalbe Farma Tbk. the maximum value is 18,572 the issuer is PT. Telekomunikasi Indonesia Tbk. On growth assets variable the minimum value is -0.718 the issuer is PT. XL Axiata Tbk. the maximum value is 6,141 the issuer is PT. XL Axiata Tbk. whereas in structure asset variable and business risk, the minimum value is 0.003 on the issuer is PT. Duta Anggada Realty Tbk. the maximum value is 5,868 on the issuer is PT. Vivatex Wheel Tbk. and the minimum value is 0.277 on PT.XL Axiata Tbk. the maximum value is 12,585 on the issuer is PT. Radiant Utama Interinsco Tbk.

Selection of Data Estimation Model Common Effect vs. Fixed Effect Panel (Chow Test)

From chow test in Table 3, It can be seen that Cross-section Chi-square < α with value 0.0000 < 0.05. This can be interpreted that between model of common effect and fixed effect, the best model used as panel data regression model is fixed effect. The next step is to find the best model between fixed effect model and random effect with Hausman test.

Tabel 4. Hausman test output

From Hausman test in Table 4, It can be seen that P-value < α with value 0.000 < 0.05. This can be interpreted that between fixed effect model and random effect model, the best model to be used as panel data regression model is fixed effect. Therefore a definite model used in panel data regression is fixed effect model and it is not necessarily to do the next test that is Lagrange multiplier test.

Tabel 5. Classical Assumption Test

Based on Jarque-Bera normality test results in Table 5, it can be seen that Jarque-Bera value is smaller than Chi-Square Table value and probability is bigger than sig. α (0.0067755 > 0.05) means Ho is accepted and Ha is rejected which means that the residual is normally distributed.

Tabel 6. Multicollinearity test

Based on Jarque-Bera normality test results in Table 5, it can be seen that Jarque-Bera value is smaller than Chi-Square Table value and probability is bigger than sig. α (0.0067755 > 0.05) means Ho is accepted and Ha is rejected which means that the residual is normally distributed.
Based on the output of correlation matrix in Table 6, it can be seen that there is no big enough coefficient, even all correlation coefficient between independent variable still under the requirement of multicollinearity which is 0.90 (Ghozali & Ratmono, 2013). Thus, based on these results it can be concluded that there is no multicollinearity.

**Table 7. Autocorrelation Test**

<table>
<thead>
<tr>
<th>Value</th>
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<tbody>
<tr>
<td>Coef SPEED</td>
</tr>
<tr>
<td>Prob SPEED</td>
</tr>
<tr>
<td>DW Stat</td>
</tr>
</tbody>
</table>

The results of this study yield Durbin-Watson value is 2.114816 Durbin-Watson value will be compared with value of Durbin-Watson Table using significance value is 0.05 and 512 data and 4 independent variables (k = 4). Yield the value dl = 1.85587 and du = 1.87596 in Durbin-Watson Table. Durbin-Watson value is 2.114816 is greater than the upper limit (df = 1.85587) and less than 4-du (4-1.87596 = 2.12404). Thus, it can be concluded that there is no autocorrelation since the Durbin-Watson value lies between du and 4-du (1.85587 < 2.114816 < 2.12404).

**Table 8. Heteroscedasticity Test**

<table>
<thead>
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<th>Variable</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>.0000</td>
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<tr>
<td>Company Size</td>
<td>.3646</td>
</tr>
<tr>
<td>Asset Growth</td>
<td>.4123</td>
</tr>
<tr>
<td>Asset Structure</td>
<td>.1407</td>
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<tr>
<td>Business Risk</td>
<td>.2628</td>
</tr>
</tbody>
</table>

The Glejser Test Result in Table 8 shows that company size, asset growth, asset structure and business risk have significant value are 0.3646, 0.4123, 0.1407, 0.2628. Significant value on the four variables is greater than the significant value 0.05; it means that there is no heteroskedasticity on all variables.

**Table 9. The Average of PAM test results**

<table>
<thead>
<tr>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coef. SPEED</td>
</tr>
<tr>
<td>Mean</td>
</tr>
</tbody>
</table>

Based on the model on the Partial Adjustment Model, AdjustmentSpeed value in non-financial companies listed in Indonesia as a whole if it is seen from speed coefficient yielded -0.093 < 1 indicates that adjustment speed on the existing capital structure in non-financial companies is not optimal in making adjustments, so the company are not in the optimal capital structure. Based on adjustment speed equation when it is inputted on each companies obtained an average value is 0.643 < 1 indicates that the average of non-financial companies in Indonesia is not optimal in doing adjustment speed so that they are not in the optimal capital structure, so H1 is accepted.

**Panel Data Regression Model with Fixed Effect Approach**

**Table 10. Regression Output Fixed Effect Model**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPEED</td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>.397250</td>
</tr>
<tr>
<td>SIZE</td>
<td>.249873</td>
</tr>
<tr>
<td>GROWTH</td>
<td>-.008330</td>
</tr>
<tr>
<td>TANG</td>
<td>.584119</td>
</tr>
<tr>
<td>RISK</td>
<td>.004663</td>
</tr>
</tbody>
</table>

The research model which is to determine the effect of company size, asset growth, asset structure, and business risk against capital structure adjustment speed for the period 2006-2016 are:

\[
\Delta \text{SPEED} = 0.397250 + 0.249873\text{SIZE} - 0.008330\text{GROWTH} + 0.584119\text{TANG} + 0.004663\text{RISK}
\]

**Goodness of Fit Test**

**F-statistics Test**

**Table 11. F Test**

<table>
<thead>
<tr>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prob (F-statistik)</td>
</tr>
<tr>
<td>Σ</td>
</tr>
</tbody>
</table>

Based on the test results in Table 11, Probability (F-statistic) is 0.00000. The level of significance is smaller than 0.05 it means that Company Size, Asset Growth, Asset Structure and Business Risks simultaneously affect Capital Structure adjustment speed, so Hα is accepted.
Determination Coefficient Test

Tabel 12. Determination Coefficient Test

<table>
<thead>
<tr>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>R2</td>
</tr>
<tr>
<td>.926340</td>
</tr>
</tbody>
</table>

From Table 12, the value of Adjusted R Square is 0.926340 or 92.63%; it can be concluded that Company Size, Asset Growth, Asset Structure and Business Risk can explain 92.63% while the rest 7.37% is explained by other variables outside the model. High determination coefficient value means that the ability of independent variable to affect dependent variable.

Hypothesis testing

Tabel 13. T-Test

<table>
<thead>
<tr>
<th>Var.</th>
<th>Beta</th>
<th>Std.</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>.397250</td>
<td>.012395</td>
<td>32.04910</td>
<td>.0000</td>
</tr>
<tr>
<td>Size</td>
<td>.249873</td>
<td>.107330</td>
<td>2.328084</td>
<td>.0203</td>
</tr>
<tr>
<td>Growth</td>
<td>-.008330</td>
<td>.002602</td>
<td>-3.201436</td>
<td>.0015</td>
</tr>
<tr>
<td>Tang</td>
<td>.584119</td>
<td>.011051</td>
<td>52.85822</td>
<td>.0000</td>
</tr>
<tr>
<td>Risk</td>
<td>.004663</td>
<td>.002398</td>
<td>1.944855</td>
<td>.0524</td>
</tr>
</tbody>
</table>

Based on Table 13, calculation of partial test yield t value is 2.328084 and significant value is 0.0203 showed significant positive effect between company size variable against capital structure adjustment speed (Adjustment Speed) so that Ha2 is accepted.

Based on Table 13, calculation of partial test obtained t value is -3.201436 and significant value is 0.0015 showed significant negative effect between asset growth variable to capital structure adjustment speed (Adjustment Speed) so that Ha3 is accepted.

Based on Table 13, calculation of partial test obtained t value equal to 52.85822 and significant value equal to 0.0000 show significant positive effect between asset structure variable against capital structure adjustment speed (Adjustment Speed), so Ha4 is accepted.

Based on Table 13, calculation of partial test obtained t value is 1.944855, and significant value is 0.0524 showed a positive but not significant effect between business risk variables against capital structure adjustment speed ( Adjustment Speed) so that Ha5 is rejected.

Based on the results of regression of adjustment speed (Adjustment Speed) on the factors that affect adjustment speed (Adjustment Speed). Table 13 shows that company size shows a significant positive effect. The results are in line with the dynamic capital structure theory and Darminto and Manurung (2008) which states that companies with large company sizes have small possibility of bankruptcy, so it is easy to obtain loans and make adjustments speed (Adjustment Speed). Significant positive effect shows that companies in Indonesia still have unstable income, but creditors in Indonesia pay attention to factors of company size in providing loan in form of debt.

The next factor is asset growth in Table 13, it can be seen that asset growth has a negative and significant effect. Murhadi and Liliana’s opinion (2011) which states that the high assets growth in the company has big possibility to bankruptcy, so the results are not in line with the theory. The results that show significant negative to Indonesian companies mean that creditors in Indonesia consider growth factors in lending loans to companies that have high asset growth.

Another result is asset structure factor. In Table 13 shows a significant positive result on the asset structure in Indonesian companies. These results are in line with dynamic capital structure theory and Admaja’s (2010) opinion states that companies with positive asset structures have more fixed assets that can be used as collateral. The positive asset structure also illustrates that the creditors in Indonesia are very considerate in collateral when providing loan.

On the business risk factors seen in Table 13 have positive but insignificant results. The results are not in line with researchers and dynamic capital structure theory which states that companies with high business risk tend to have low operating profit and difficult to obtain loan debt. Business risks which have negative but insignificant results indicate that not all creditors in Indonesia consider the presence or absence of business risk on the company to be given a loan.

CONCLUSION AND RECOMMENDATION

Based on the results of this study, it can be concluded that adjustment speed value in non-financial companies in Indonesia on average has adjustment speed value less than one which is 0.642836 where it means that non-financial companies in Indonesia have not reached the optimal capital structure. Based on the consideration of writer logical thinking, dynamic capital structure theory and the previous research about capital structure adjustment speed in Indonesia has not reached the optimum point, it is caused
by the factors that affect optimal leverage at the company in Indonesia has not been in a good position and companies in Indonesia more tend to pay attention to profits from the optimal capital structure.

Based on the result of the research, it can be concluded that only business risk factors do not affect adjustment speed (Adjustment Speed) and positively affect adjustment speed (Adjustment Speed), so that when a company will choose capital source in capital structure need to pay attention to business risk which can happen at the company and minimize the occurrence of such risks, so that the company can perform the capital structure speed optimally.

REFERENCES


