Management Analysis Journal

Management Analysis Journal

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The Heterogeneity of Speed of Adjustment Capital Structure Across Industrial Sectors

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Article Information

Article History:
Received February 2021
Approved March 2021
Published March 2021

Keywords:
Speed of adjustment, Target Leverage, Across sector industry

Abstract

This study aims to analyze heterogeneity of speed of adjustment on basic industry, consumer goods, and misceleeneous companies. The population in this study uses basic industry, consumer goods, and miscellenoeus companies listed on the Indonesia Stock Exchange in 2009-2018 period. The method of determining the sample using a pusposive sampling technique based on criteries determined by researchers. We employ two-step partial adjustment model and use measure of book leverage and firm characteristic; profitability, size, tangibility, and growth which has an influence leverage target to estimate speed of adjustment. For three industries, there is evidence of heterogeneity of speef adjustment. The result showed that speed of adjustment 24% of basic industry, 37.1% of consumer goods, and 27.3% of miscellaneous industry.

INTRODUCTION

Each company has a different composition of capital structure even though it is in the same industry (Riyantina & Ardiansari, 2017). The company's capital structure is a combination of long-term debt and equity that the company uses to finance its operations (Abor, 2007). The company's funding process can be done through internal and external financing (Amirya & Atmini, 2008). External sources of funding are loans and internal funding in the form of stock or bond funds (Barokah & Yulianto, 2016) Companies that need external funding will access the capital market (Martono et al., 2020). Pecking order theory explains the company's funding hierarchy starting from the safest, namely companies prioritizing the use of internal funding (Pudak, 2014). According to Ridloah (2010), the optimal capital structure is one that optimizes the balance between risk and return to maximize the value of the company's shares. The optimal capital structure can be observed when the company follows the funding hierarchy; the company will use internal funding, followed by external funding, and finally equity funding (Baskin, 1989).

The manufacturing industries listed on the Indonesia Stock Exchange consist of basic industry, consumer goods and miscellaneous sectors (www.idx.co.id). The industrial sector becomes a benchmark for national industrial development in a country. The manufacturing industry in Indonesia is an economic driver that has an influence on other sectors. On the other hand, the manufacturing industry also contributes to economic growth, which is reflected in the value of the Gross Domestic Product (www.bi.go.id).

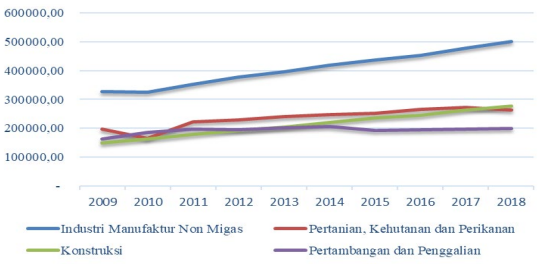

Figure 1. Gross Domestic Product (GDP) at 2000 Constant Prices by Business Field (billion Rupiah) 2009-2018.

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e-ISSN 2502-1451

Figure 1 above shows that the manufacturing industry is the largest contribution to GDP compared to other sectors. This condition indicates that the Indonesian economy is dominated by contributions from the manufacturing sector. Based on data from the Central Bureau of Statistics, from 2009 to 2018 the GDP growth rate according to the business field showed that the manufacturing industry increased by 52.66% to 449.7 trillion.

In 2010, the contribution decreased by 0.81%, which is estimated to be due to the decline in growth of each industrial branch year on year. However, based on the graph above, the manufacturing sector remains the largest contributor compared to other industries such as agriculture, forestry and fisheries; construction; mining and excavation; and real estate. In addition, the manufacturing sector is projected to have promising business prospects, therefore in expanding it requires capital as a source of funding

The company's funding process can be done through internal and external financing (Amirya & Atmini, 2008). The company's internal financing can use the company's operating profit and cash flow, while the company's external source of financing is through the use of debt (Ferdiansya & Isnurhadi, 2013). However, if the need for funds has increased and cannot be met with internal capital, the only option for the company is to choose debt instead of issuing new equity because the costs will be more expensive (Myers & Majluf, 1975)

The optimal capital structure of the company is the ideal level of leverage that is owned by each company which will affect earnings per share, level of risk, and share price. The optimal capital structure is very dynamic and fluctuates in certain spaces (Fischer et al., 1989). Although deviations from the ideal leverage level often occur in the course of the business, the company will gradually make adjustments from time to time which leads to an optimal capital structure (Cempakasari et al., 2019). Thus, the optimal capital structure becomes an important factor affecting the speed of adjustment.

Speed of adjustment is the length of time required by a company to adjust its capital structure towards its optimal capital structure (Nosita, 2012). The speed of adjustment varies between companies and even between industries and between times and the speed of adjustment can be influenced by company-specific characteristics that reflect the fundamental determinants of the capital structure itself (Flannery & Rangan, 2006) pecking order, and market timing. Most companies will make adjustments to their capital structure when the company has debt on target with a financial surplus or deficit (Byoun, 2008).

It is consistent with past literature that the notion of theory, especially trade-off theory, focuses on the static trade-off theory method (Naveed et al., 2015). However, there are several research focuses that are often neglected in the static trade-off theory framework as stated by Heshmati (2001) that the previous researchers only measured the actual leverage level which is used as a proxy of the capital structure so that the possibility of deviation from optimal leverage is high. In addition, the static trade-off theory model also cannot get the dynamics that occur in an ever-changing company environment so that it cannot measure the changes that occur due to adjustments to the actual capital structure against the leverage target made by the company every year (Cempakasari et al., 2019).

Recent research on capital structure has shifted from a static model to a dynamic model using various dynamics of company specifications which are expected to capture adjustments towards target leverage (Saadah & Prijadi, 2012). According to Drobetz and Wanzenried, (2006) the standard capital structure model cannot capture dynamic adjustments in leverage ratios as evidenced by a recent survey by Drobetz and Wanzenried (2006) which suggests that corporate decision makers seek a target debt-to-equity ratio. Therefore, a more realistic approach guarantees an economic shock or other changes that occur that systematically deviate from the target leverage, namely by using a dynamic model (Naveed et al., 2015).

Company characteristics are a causal factor that can determine a dynamic capital structure, but it also significantly affects the speed of adjustment (Haron et al., 2013). Research on company characteristics variables that affect capital structure has been carried out by several researchers, such as: Nosita (2012) examines tangibility, market-to-book ratio, firm's size, and profitability as determinants of target leverage. Indriani and Widyarti (2013) examined the optimal capital structure using the variables of growth of sales, growth of assets, return on assets, size of firm, and liquidity. An optimal capital structure uses agency costs, tax rate, bankruptcy costs, and profitability variables (Sayeed, 2011). However, in this study the researcher will use company characteristic variables such as: profitability, size, tangibility, and growth opportunity which significantly have an effect on leverage (Rajan & Zingales, 1995) and robust on leverage (Frank & Goyal, 2009

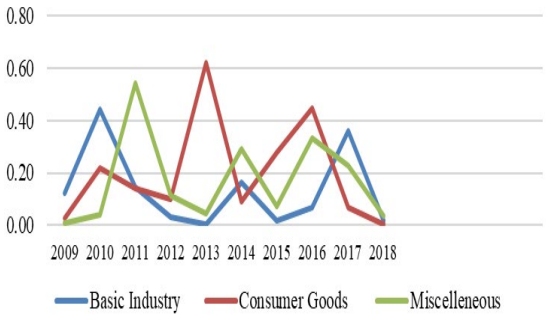

Figure 2. Speed of adjustment in the manufacturing sector.

Figure 2 shows that the value of the adjustment speed of the capital structure varies. Based on the dynamic trade-off, the company will make adjustments towards the target leverage when there is a deviation. However, based on the adjustment speed data in figure 2, the value of adjustment speed for basic industry in 2013 is 0.004, consumer goods is 0.002 in 2018, and miscelleneous is 0.001 in 2009. This means that companies in that sector do not make adjustments because the adjustment speed values are the same. with zero. Thus, there is a gap phenomenon between the dynamic trade-off and the actual conditions. In estimating the adjustment speed of the capital structure Ozkan (2001); Flannery and Rangan (2006) pecking order, and market timing assume that the adjustment speed is homogeneous across firms. This assumption is not consistent with the dynamic trade-off, that there is heterogeneity in the speed of adjustment of capital structure between companies and even industries. Thus, the research will find empirical evidence of differences in the speed of adjustment of the capital structure in each industrial sector; basic industry, consumer goods, and miscelleneous.

Hypotheses Development

Public companies in Indonesia tend to use a dynamic trdae-off approach in making capital structure decisions (Yulianto et al., 2018). Dynamic capital structure theory assumes a partial adjustment to the optimal capital structure with more realistic results (Haron et al., 2013). The dynamic capital structure is a refinement of the weaknesses that exist in the static model, namely the static model forgets the optimal restructuring of the capital structure to respond to fluctuations in asset value from time to time (Darminto., 2008).

The dynamic capital structure is characterized by the fact that companies set long-term debt and equity targets and gradually adjust their capital structure towards the leverage target when deviations occur due to diversity or economic shock (Ozkan, 2001). This capital structure is dynamic so that companies need to make adjustments if the target leverage is considered incompatible with actual leverage (Yulianto et al., 2016) the data were gathered from statistics and annual report of IDX in 2009. There were 46 companies that distributed dividends in 2008 (this year was used as the base year to discover the changes). According to Naveed et al. (2015), there are two parameters of dynamic capital structure, namely the target leverage, followed by a speed of adjustment.

According to Patricia (2016), the dynamic model of capital structure has better explanatory power than the static model, this is because dynamic models offer a more complete representation of financial behavior. Surwanti (2015) explains three things, first, the dynamic model accommodates the possibility that the company is not on the leverage target, where the targeted leverage is not the same as the company's leverage realization. Second, estimating the speed of adjustment, in which the company adjusts its capital structure towards the target leverage with various adjustment speeds and varies from time to time. Third, the dynamic model includes adjustment speed parameters in determining the company's capital structure.

Dynamic capital structure theory states that the difference in the cost of deviation and different adjustment costs will result in different estimates for the speed of capital structure adjustment (Abdeljawad et al., 2013). Haron et al. (2013) state that the present study examines the dynamic aspects of capital structure of 269 non-financial listed firms in Thailand from 2000 to 2009. This is a relatively new area in finance literature. The present study investigates the existence of target capital structure, speed of adjustment and factors affecting the speed of adjustment. The analyses are conducted using the dynamic Partial Adjustment Model (PAM) stated that company characteristics are the causal factors that can determine a dynamic capital structure. The company's leverage target will be achieved if it uses debt as a source of funding. But in reality, the company will experience financial difficulties if it uses a lot of debt in determining the source of its capital.

The dynamic capital structure theory explains that there are variations in the speed of adjustment in companies in each industrial sector because of the different characteristics of the

company. Warmana and Widnyana (2013), stated that the speed of adjusting the capital structure in the agricultural industry sector is 40% per year.

The average value of the speed of capital structure adjustment in non-financial companies listed on the IDX is 64.28% (Sibuea & Yulianto, 2018). Cahyaningdyah (2019) found that there is heterogeneity in the speed of adjusting the capital structure in each industrial sector, companies in the agriculture sector make adjustments by 40%, basic industry 56%, consumer goods 39%, infrastructure 42%, mining 23%, miscelleneous 47%, property 35%, and trade and investment 33%. Meanwhile, in the research of Haron et al. (2013) the present study examines the dynamic aspects of capital structure of 269 non-financial listed firms in Thailand from 2000 to 2009. This is a relatively new area in finance literature. The present study investigates the existence of target capital structure, speed of adjustment and factors affecting the speed of adjustment. The analyses are conducted using the dynamic Partial Adjustment Model (PAM), the financial industry sector in Malaysia made an adjustment by 43.%. Indian manufacturing companies have a target capital structure and the speed of adjustment to the target capital structure is around 40% (Mukherjee & Mahakud, 2012).

Research on the speed of adjustment was also carried out in developed countries, Smith et al. (2010) in their findings explaining that companies in New Zealand are moving towards the leverage target at the level of 58.7%. Mukherjee and Wang (2013) found that the average adjustment speed across U.S. firms is around 12%. In non-financial companies in Thailand Haron et al. (2013) examines the dynamic aspects of capital structure of 269 non-financial listed firms in Thailand from 2000 to 2009. This is a relatively new area in finance literature. The present study investigates the existence of target capital structure, speed of adjustment and factors affecting the speed of adjustment. The analyses are conducted using the dynamic Partial Adjustment Model (PAM) found that the speed of adjustment towards the leverage target is 64.10% per year.

Ramjee and Gwatidzo (2012) found that the adjustment speed of companies in South Africa was 80.2%. Ozkan (2001) in his research found that the adjustment speed of UK non-financial companies was 57%. Based on the results of these studies, it can be hypothesized that there is heterogeneity in both adjustment speed in each industrial sector.

H1: There is a speed of adjustment capital structure to the leverage target in the basic industry sector.

H2: There is a speed of adjustment capital structure to the leverage target in the consumer goods.

H3: There is a speed of adjustment capital structure to the leverage target in the miscellaneous.

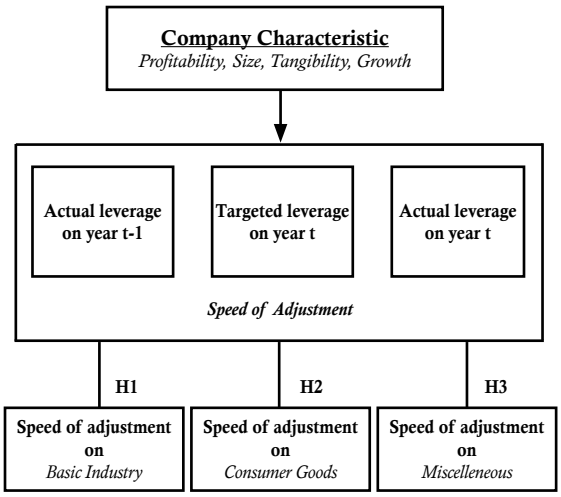

Figure 3. Research Model

METHOD

This type of research used in this research is explanatory research with a quantitative method approach. This research was conducted with the aim of knowing the speed of adjustment in each of the basic industry, consumer goods, and miscelleneous sectors listed on the IDX for the 2009-2018 period.

The population in this study is the basic industry, consumer goods, and miscelleneous sectors listed on the Indonesia Stock Exchange for the 2009-2018 period. The population in this study was 68 companies in the basic industry, 49 companies in consumer goods, and 45 companies in miscellaneous. In determining the sample, the researcher used a purposive sampling method with the consideration of subjective criteria to obtain a representative sample according to the specified criteria.

The following criteria are used with the purposive sampling method: (a) Companies in the manufacturing sector listed on the Indonesia Stock Exchange for the 2009-2018 period (b) companies that publish financial reports consecutively during the study period 2009-2018 (c) compa-

nies that provide data required for the 2008-2018 period. After conducting purposive sampling, it was obtained a sample of 31 companies in the basic industry, 26 companies in consumer goods, and 24 companies of miscellaneous.

This study uses a two-step partial adjustment model (PAM) to estimate the value of the capital structure adjustment speed. Research Smith et al. (2010) states that the partial adjustment model is supported by the results of other studies in estimating the speed of capital structure adjustment. On the other hand, in Cahyaningdyah (2019) use of a two-stage partial adjustment model assumes that all companies in the sample adjust at the same average speed and are more flexible. The steps to estimate the adjustment speed are as follows:

The first step is to estimate the target leverage regression equation (Lev*) for each industrial sector. The following is the equation for calculating the speed of capital structure adjustment which refers to the study (Smith et al., 2010; Cahyaningdyah, 2019).

$$Lev^* = \beta_1 + \beta_2 Prof_{t-1} + \beta_3 Size_{t-1} + \beta_4 Tang_{t-1} + \beta_5 Growth_{t-1} +$$

Information:
Lev* = target leverage
β_0 = constant
$\beta_{1,\ldots}\beta_4$ = coefficient of each independent variable
t-1 = period t-1
ε = error term

The second step is to estimate the speed of adjustment towards the target leverage. The following is the equation for calculating the speed of capital structure adjustment which refers to the research (Smith et al., 2010; Cahyaningdyah, 2019).

$$Levi,t = Levt - 1 = \delta (Lev^* - Lev - 1) + \varepsilon it$$

Information:
Levit = Leverage it
Lev* = Optimal Leverage
δ = Coefficient Speed of Adjustment (SOA)
Lev t-1 = Leverage t-1

This study uses one dependent variable book leverage and four independent variables, namely profitability, size, tangibility, and growth opportunity, which significantly have an effect on leverage (Rajan & Zingales, 1995) and robust on leverage (Frank & Goyal, 2009). The following is a summary of the research variables:

Leverage is the composition of company funding consisting of debt and equity in determining the long-term capital structure. According to Haas and Peeters (2004) leverage is the use of a number of debt which is used as a source of corporate financing. Meanwhile (Indriani & Widyarti, 2013) leverage is a comparison of debt and equity. To find out how much assets are financed by debt Wahidah and Ardiansari (2019) use a debt to asset ratio. The following is the formula for calculating leverage according to Cahyaningdyah (2019):

Profitability is the company's ability to obtain profits or profits from the management of company assets and the company's production activities. According to Yuliana (2013) profitability shows the effectiveness of the company in operating. Profitability is the level of net profit that a company can generate in carrying out its operations (Maftukhah, 2013). The proxy used to measure profitability is managing before interest and tax (EBIT) divided by total assets (Elsas & Florysiak, 2011).

$$\text{Profitability} = \frac{\text{EBIT}}{\text{Total Asset}}$$

Firm size is a measure of the size of a company as seen from the sales value, components of current and non-current assets, and the company's equity. Total assets are a proxy that can show how big the size of a company (Baker & Wurgler, 2002).

$$\text{Size} = \text{Total Asset}$$

Tangibility is an asset owned by a company that comes from current and non-current assets that can be used as collateral for the company's debt. Tangible assets are a comparison between the ratio of fixed assets to total assets (Rajan & Zingales, 1995).

$$\text{Tangibility} = \frac{\text{Fixed Asset}}{\text{Total Asset}}$$

Growth opportunities are opportunities for company growth in the future by looking at changes in assets owned by the company. Research by Elsas and Florysiak (2008) and Mahakud and Mukherjee (2011) use the market to book ratio proxy to measure growth opportunity. Market to book ratio is a proxy used to measure the growth opportunity in the leverage target (Drobetz & Wanzenried, 2006).

RESULTS AND DISCUSSION

In this study, using descriptive statistical analysis to describe each variable individually with the results can be seen in tables 1, 2, and 3.

Descriptive Statistics

Table 1. Descriptive Statistic Results Basic Industry

	Lev	Prof	Size	Tang	Growth
Mean	0.50	0.08	28.15	0.47	0.72
Max	2.10	5.60	31.52	2.43	2.95
Min	0.07	-0.28	24.85	0.004	0.02
Std. Dev.	0.27	0.48	1.48	0.26	0.38
Obs.	310	310	310	310	310

Table 2. Descriptive Statistic Results Consumer Goods

	Lev	Prof	Size	Tang	Growth
Mean	0.41	0.12	28.27	0.38	1.32
Max	0.89	0.86	32.15	0.97	28.64
Min	0.004	-0.17	25.11	0.04	0.004
Std. Dev.	0.19	0.14	1.77	0.19	2.68
Obs.	260	260	260	260	260

Table 3. Descriptive Statistic Results Miscelleneous

	Lev	Prof	Size	Tang	Growth
Mean	0.50	0.05	28.24	0.37	0.73
Max	0.92	0.70	33.32	0.94	4.66
Min	0.02	-0.25	25.65	0.00	0.13
Std. Dev.	0.19	0.09	1.47	0.19	4.47
Obs.	240	240	240	240	240

Table 4. Chow Test Result Basic Industry

Effect test	Statistic	d.f.	Prob.
Cross-section F	14.430667	-30,275	0.0000
Cross-section Chi-square	293.123604	30	0.0000

Table 5. Chow Test Result Consumer Goods

Effect test	Statistic	d.f.	Prob.
Cross-section F	14.658878	-23,212	0.0000
Cross-section Chi-square	228.430315	23	0.0000

Table 6. Chow Test Result Miscelleneous

Effect test	Statistic	d.f.	Prob.
Cross-section F	14.658878	-23,212	0.0000
Cross-section Chi-square	228.430315	23	0.0000

Based on table 4,5,6, it can be seen that the cross-section probability value of Chi-squares in basic industry, consumer goods, and miscelleneous companies is $<\alpha = 5\%$. Based on these results it can be concluded that H0 is rejected and H1 is accepted. That is, between the common effect model (CEM) and the fixed effect model (FEM), the model that is more appropriate to use for regression models in basic industry, consumer goods, and miscellaneous is the fixed effect model (FEM).

Table 7. Hausman Test Result Basic Industry

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section F	4.503024	4	0.3422

Table 8. Hausman Test Result Consumer Goods

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section F	15.388619	4	0.004

Table 9. Hausman Test Result Miscelleneous

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section F	25.221592	4	0.0000

Based on table 7,8,9 of the results of the hausman test at consumer goods and miscelleneous companies, the random cross-section va-

lues are 0.004 and 0.000, these values are less than the predetermined significance level of 0.05, so from these results the researcher accepts H0 and rejects H1. Based on the Chow and Hausman tests, it can be concluded that the most appropriate regression model for consumer goods and miscellaneous companies is the fixed effect model (FEM).

Meanwhile, the basic industry company shows that the probability value of random cross-section is 0.3422. Based on the hypothesis that has been compiled, it can be concluded that in basic industry companies, it can be concluded that H0 is accepted and H1 is rejected because the significance value is α> 0.05 or 5%. So the most appropriate regression model to regress panel data for basic industry companies is the random effect model. To strengthen the results, a further test is needed, namely the lagrange multiplier (LM) test to select the final model that is appropriate for panel data regression, namely between the commen effect or the random effect.

Table 10. Lagrange Multiplier Tes Results Basic Industry

	Test Hypotheses		
	Cross-section	**Time**	**Both**
Breusch-Pagan	423.6542	2.469968	426.1241
	(0.0000)	(0.1160)	(0.0000)

Based on table 10, it can be seen that the probability value of Breusch-Pagan <α = 5% in basic industry companies <0.05. The Breusch-Pagan probability value in basic industry is 0.0000 <0.05. Based on the results it can be concluded that H0 is rejected and H1 is accepted. That is, between the common effect model (CEM) and the random effect model (REM), the more appropriate model to use for regression models in basic industry is the random effect model (REM).

Table 11. Goodness of Fit Test Results Basic Industry, Consumer Goods, dan Miscelleneous

	Basic Industry	**Consumer Goods**	**Miscelleneous**
Adjusted R^2	0.183	0.798	0.726

Based on table 11, the adjusted R-squared basic industry value is 0.183, consumer goods is 0.798, and miscelleneous is 0.726. From the test results, it can be explained that the variable company characteristics (profitability, size, tangibility, and growth) are able to explain or influence the leverage target variable of 18.3% in basic industry companies, 79.8% in consumer goods companies, and 72.6% in miscelleneous companies, the rest is explained by variables or other causes outside the model that may affect the target leverage.

Table 12. F-Statistic Test Results Basic Industry, Consumer Goods, dan Miscelleneous

	Basic Industry	**Consumer Goods**	**Miscelleneous**
F-statistic	11.4745	12.5486	8.0201
Prob (F-Statistic)	0.0000	0.0000	0.0000

Based on table 12, the results of the F-statistic test explain that the probability value of F-statistics in basic industry, consumer goods, and miscelleneous companies is 0.0000 or <0.05 (5%). From the results it can be concluded that the variable company characteristics (profitability, size, tangibility, and growth) simultaneously have a significant effect on the target leverage.

Table 13. Regression Test Result Target Leverage

	Coefficient		
Variable	**Basic Industry**	**Consumer Goods**	**Miscelleneous**
C	1.873	0.988	-1.180
Prof	-0.323	-0.291	-0.659
Size	-0.276	-0.086	0.371
Tang	0.222	0.076	0.054
Growth	0.215	0.006	0.112

Based on table 13 of the regression results, in basic industry companies the regression equation can be obtained as follows:

$$Lev^* = 1.873 - 0.323 Prof_{t-1} - 0.323 Size_{t-1} - 0.222 Tang_{t-1} + 0.215 Growth_{t-1}$$

The constant value is 1,873. This means that if the profitability, size, tangibility, and growth are constant or equal to zero, the average leverage for the basic industry target is 1,873 units.

The profitability regression coefficient value is -0.323, meaning that each increase in the profitability variable is 1 unit, then the basic in-

dustry leverage target variable will decrease by 0.323 units, assuming the other independent variables are constant. The regression coefficient value of -0.276 means that for each increase in the size variable by 1 unit, the leverage variable for the basic industry target will decrease by 0.276 units, assuming the other independent variables are constant. The regression coefficient value of tangibility is 0.222, meaning that every increase in the tangibility variable is 1 unit, then the leverage variable for the basic industry target will increase by 0.222 units, assuming the other independent variables are constant. The growth regression coefficient value is 0.215, which means that every increase in the growth variable is 1 unit, then the leverage variable for the basic industry target will increase by 0.215 units, assuming the other independent variables are constant. Based on table 13 of the regression results, the consumer goods company can obtain the following equation:

$$Lev^* = 0.988 - 0.291Prof_{t-1} - 0.086Size_{t-1} + 0.076\text{Nlog}Tang_{t-1} + 0.006Growth_{t-1}$$

A constant value of 0.988 means that if the profitability, size, tangibility, and growth are constant or equal to zero, then the average leverage target for consumer goods is 0.988 units. The profitability regression coefficient value is -0.291, which means that for each increase in the profitability variable of 1 unit, the leverage variable for the target consumer goods will decrease by 0.291 units, assuming the other independent variables are constant. The size regression coefficient value is -0.086, which means that for each increase in the size variable by 1 unit, the leverage variable for target consumer goods will decrease by 0.086 units, assuming the other independent variables are constant. The tangibility regression coefficient value is 0.076, which means that for each increase in the tangibility variable by 1 unit, the leverage variable for target consumer goods will increase by 0.076 units, assuming the other independent variables are constant. The growth regression coefficient value is 0.006, which means that each increase in the tangibility variable is 1 unit, then the leverage variable for the target consumer goods will increase by 0.006 units, assuming the other independent variables are constant.

Miscelleneous

Based on table 13 of the regression results, in Miscellaneous companies the regression equation can be obtained as follows:

$$Lev^* = -1.180 - 0.659Prof_{t-1} + 0.371Size_{t-1} + 0.054Tang_{t-1} + 0.112\text{Nlog}Growth_{t-1}$$

A constant value of -1.180 means that if the profitability, size, tangibility, and growth are constant or equal to zero, the average leverage for the miscelleneous target will decrease by 1,180 units. The profitability regression coefficient value is -0,659, which means that for each increase in the profitability variable by 1 unit, the miscelleneous target leverage variable will decrease by 0.659 units, assuming the other independent variables are constant. The value of the size regression coefficient is 0.371, meaning that every increase in the size variable is 1 unit, then the miscelleneous target leverage variable will increase by 0.371 units, assuming the other independent variables are constant. The regression coefficient for tangibility is 0.054, which means that each increase in the tangibility variable is 1 unit, then the miscelleneous target leverage variable will increase by 0.054 units assuming the other independent variables are constant. The growth regression coefficient value is 0.112, meaning that every increase in the growth variable is 1 unit, then the miscelleneous target leverage variable will increase by 0.112 units, assuming the other independent variables are constant.

Table 14. Dynamic Regression Test Result

Variable	C	Prob.	X1	Prob.
Basic Industry	-0.067	0.000	0.240	0.000
Consumer Goods	-0.049	0.000	0.371	0.000
Miscelleneous	-0.097	0.000	0.273	0.000

Based on Table 14, it is found that the speed of adjustment coefficient (δ) for each industrial sector can be said to be underleverage because the value of the speed of adjustment is less than one. The coefficient value of the adjustment speed of the capital structure in basic industry is 0.24 with a probability of 0.000. In the industry, the coefficient of adjustment for the capital structure of consumer goods is 0.371, with a probability of 0.0000. Whereas in miscelleneous companies, the regression coefficient value is 0.273 with a probability of 0.0000.

This study finds strong evidence that companies in the basic industry, consumer goods, and miscelleneous sectors made adjustments to their

leverage targets during the 2009-2018 period. In the basic industry, adjustments are made to the leverage target of 24%, consumer goods of 37.1%, and miscelleneous of 27.3%. There are differences in the speed of adjustment in each industrial sector due to the determinant of leverage in each company and industrial sector. Based on the dynamic capital structure test results, the value of adjustment speed for basic industry companies, consumer goods, miscelleneous <1, means that companies in that sector are not optimal in making adjustments to the target leverage. In line with the dynamic capital structure theory, companies that are far from the target leveraget show a faster adjustment than companies that are close to the target (Abdeljawad et al., 2013). It is predicted that the speed of adjustment is not optimal in each industry because the use of leverage is not optimal.

There is a difference in the speed of adjustment between basic industry, consumer goods, and miscellaneous industry sectors in line with Cahyaningdyah (2019) that the basic industry made adjustments by 56%, consumer goods 39%, infrastructure 42%, mining 23%, miscelleneous 47%, property 35%, and trade and investment at 33%. While Sibuea & Yulianto (2018), found that the average speed of capital structure adjustment in non-financial companies listed on the IDX is 64.28%. Meanwhile, Haron et al. (2013) using a sample of Malaysian companies, the non-financial industry sector adjusted 43%

Research on the speed of adjustment was also carried out by developed countries, Smith et al. (2010) their findings explaining that companies in New Zealand are moving towards the leverage target at the level of 58.7%. In non-financial companies in Thailand Haron et al. (2013) the present study examines the dynamic aspects of capital structure of 269 non-financial listed firms in Thailand from 2000 to 2009. This is a relatively new area in finance literature. The present study investigates the existence of target capital structure, speed of adjustment and factors affecting the speed of adjustment. The analyses are conducted using the dynamic Partial Adjustment Model (PAM found that the speed of adjustment towards the leverage target is 64.10% per year. Ramjee and Gwatidzo (2012) found that the adjustment speed of companies in South Africa was 80.2%. Ozkan (2001) in his research found that the adjustment speed of UK non-financial companies was 57%.

The difference in the speed of adjustment in developing and developed countries is because the capital markets of developing countries are characterized by complex information asymmetry compared to developed countries (Stiglitz, 1989). This shows that the low speed of adjustment in developing country capital markets is predicted by companies to consider debt financing as a source of external funding. There are differences in the results of the speed of adjustment that occur in basic industry, consumer goods, and miscelleneous companies due to the characteristics of the companies in each industry. On the other hand, the variation in adjustment speed between industrial sectors stems from differences in industry-specific characteristics that cause heterogeneity in adjustment speed.

Based on the description above, the first hypothesis which states that there is a speed of adjustment in basic industrial companies is accepted. The second hypothesis which states that there is a speed of adjustment in consumer goods companies is accepted. The third hypothesis which states that there is a speed of adjustment in miscelleneous firms is accepted.

Based on the table of dynamic regression test results, it shows that the coefficient value of the adjustment speed of the capital structure in basic industry is 0.24. This shows that the adjustment speed of the capital structure in basic industrial companies tends to be slow with an adjustment of 24%, when compared to the value of adjustment speed for consumer goods and miscelleneous. The slow adjustment speed is also caused by the not optimal leverage target and on the other hand it is influenced by the company's characteristics towards the leverage target, this can be seen in the adjusted R-squared basic industry value of 0.183. This shows that the variables of profitability, size, tangibility, growth have an influence on the leverage target of 18.3%, while 81.7% is influenced by other variables that are not explained in the model.

Profitability variables in basic industry and miscelleneous have a significant negative relationship to the target leverage. Meanwhile, consumer goods has a negative and insignificant relationship with the leverage target. This shows that companies in this sector prefer internal funding to external funding, which is reflected in the average leverage below 0.50. In line with Heshmati (2001) research that dynamic models have a negative and significant relationship, that companies with higher profitability have a low target debt. This result is also supported by Myers (1984) who found that companies prefer internal rather than external sources of financing because

internal financing reduces the company's dependence on debt. Based on the dynamic tarde-off in research by Patricia (2016), it is explained that companies that have high profitability tend to feel more comfortable and ignore the target leverage so that companies in the basic industry tend to be slower in adjusting their leverage targets.

The size variable in basic industry and consumer goods has a significant negative relationship to the leverage target. These results are in line with research by (Heshmati, 2001). This means that the company has a large size, but funding through this debt has not yet become the main funding because companies tend to prefer internal funding. This is also in line with the existence of information asymmetry (Stiglitz, 1989). Meanwhile, miscelleneous companies have a positive and insignificant relationship with the target leverage. According to Heshmati (2001), a larger company has a higher optimal debt capacity. Based on the dyanamic tarde-off, the company will make adjustments to the leverage target more quickly if optimal capital structure financing comes from debt. So that when the company has a large size it will be easier to conduct external funding.

In basic industry and miscelleneous companies, tangibility has a significant positive relationship, but in consumer goods it has an insignificant positive relationship. The tangibility and size ratios in the three sectors are below 0.50, this shows that low tangible assets are in line with the low debt to the company. Companies with high fixed assets have a greater opportunity for debt and tend to have relatively lower bankruptcy costs. On the other hand, according to (Dang et al., 2012) allowing for asymmetries in firms' adjustments toward target leverage. Our novel estimation approach is able to consistently estimate heterogeneous speeds of adjustment in different regimes as well as to properly test for the threshold effect. We consider several proxies for adjustment costs that affect the asymmetries in capital structure adjustments and find evidence that firms with large financing imbalance (or a deficit companies that have relatively low tangible assets, lenders are likely to apply higher interest, so that debt financing is relatively more expensive. Based on the dynamic trade-off, companies with low tangibility will experience a slower adjustment speed.

Growth opportunity in basic industry and miscelleneous companies has a significant positive relationship to the leverage target, while in consumer goods it has a positive and insignificant relationship. The average growth opportunity of the three companies in the sector tends to be good because it is close to the optimal ratio, namely 0.721 for the basic industry, for consumer goods at 1.325, and for miscelleneous at 0.726. This is in line with the industrial prospect of manufacturing companies where this industry is the largest contributor to gross domestic product (GDP) (www.bps.go.id).

Companies that are growing show higher financial flexibility through external investment financing (Drobetz & Wanzenried, 2006). However, the results in this study indicate that the speed of adjustment towards the leverage target tends to be slow, as there is a positive growth opportunity but it is not matched by optimal use of debt because companies focus more on internal funding, this is reflected in the average leverage ratio> 0.50 these three industries.

CONCLUSION AND RECOMMENDATION

Based on the results of data analysis and discussion, it can be concluded that there is a speed of capital structure adjustment towards the leverage target in manufacturing companies in the basic industry, consumer goods, and miscellaneous sectors listed on the Indonesia Stock Exchange (IDX) in 2009-2018. Based on the dynamic capital structure test, it was found that the speed of capital structure adjustment in basic industry companies was 24%, consumer goods was 37.1%, and miscelleneous was 27.3%.

The heterogeneity of the adjustment speed of the capital structure in each industrial sector is due to; (1) there are differences in company characteristics in each industrial sector; (2) there are differences in industry-specific characteristics that cause heterogeneity in adjustment speed; (3) the use of debt in each industrial sector is relatively normal below number 1, it is possible for managers to consider financing through debt.

Based on the above conclusions, the speed of adjustment in basic industry, consumer goods, and miscellaneous companies tends to be slow, it is possible that the use of debt as a source of corporate financing is still not optimal towards the leverage target, this is proven that the average use of corporate debt in basic industry , consumer goods, and miscellaneous are not optimal or below number 1, therefore further research is suggested to be able to compare the speed of adjustment across industrial sectors in property, real estate and construction companies which are currently rarely studied and are unique for financing decisions through debt for fund the company's project.

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