Econometric Panel Analysis of Transportation Sub Sector companies:
Firm-specific factors Approach

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Abstract

This paper investigates the relationship between firm – specific factors and profitability in transportation sub-sector industry in Indonesia. The study has collected data from Indonesia Stock Exchange (BEI) of 26 firms from 2015 to 2019. This study explores three hypotheses explaining the relation between (i) Leverage and profitability; (ii) Firm size and firm's Profitability; and (iii) Sales growth and firm's profitability. Primarily OLS has been applied using STATA 16 software, followed by panel data estimation. In our results we do not observe that leverage can induce profitability in the study object. At the same time, sales growth and profitability is not correlated strongly. When we apply separate regression, leverage with DER and LDER proxies have strong effect on firm's profitability. Also, the relationship between firm size and profitability is strong in the 2 regressions. Meanwhile sales growth does not affect profitability. ROA has been used as the proxy of firm profitability. The results derived from regressions can put light on firm's performance specifically in transportation sub sector and, simultaneously, may set guidance for principal to make strategic decision for the company.

Keywords
Leverage, firm size, sales growth, profitability

1. Introduction

The transportation sector industry has become a concern for the Indonesian governmentin line with the acceleration of domestic infrastructure development in the last 10 years. According to the Bappenas Report (Chapter 33), policy measures and results have focused onroad infrastructure, road transport traffic, railways, river and ferry transport, sea and air transportation, and supporting the transportation sector (Ministry PPN/Bapennas, p. 33.18- 33). Approaching MEA 2016, transportation operators to be managerially successful in welcoming the implementation of the ASEAN single market in 2016 will have an impact on the liberalization of this sector so that transportation operators operate in ASEAN member countries through the cabotage principle of sea and air transportation modes which will have an impact on the national economy. especially stocks of transportation services (Ministry of Transportation of the Republic of Indonesia, 2015).

In 2020, several transportation companies experienced a decline in the third quarter, including PT Garuda Indonesia Tbk. (GIAA), PT Blue Bird Tbk. (BIRD) and PT Wintermar Offshore Marine Tbk. (WINS) which experienced a decline in the third quarter. The airline, PT Garuda Indonesia Tbk (GIAA) suffered a loss of Rp. 15 trillion in the third quarter of 2020, and only earned US$ 1.14 billion in revenue. This achievement decreased by 67.79% from the same period in 2019 which received revenues of US$ 3.54 billion and PT Blue Bird Tbk. (BIRD) which recorded a net loss of Rp156.01 billion in the third quarter of 2020 even though operating income from the taxi segment had significantly improved quarterly. Based on the financial statements for the third quarter of 2020, Blue Bird posted revenue of IDR 1.55 trillion as of September 30, 2020. This realization decreased by 47.55% from IDR 2.96 trillion in the same period last year. PT Wintermar Offshore Marine Tbk also experienced a decline. (WINS) which experienced a decline in the first nine months of this year, namely in the third quarter of 2020. Based on the company's financial reports, the revenue of PT Wintermar Offshore Marine Tbk. This was only US$ 31.4 million until the end of September 2020. This realization decreased by 23.5% compared to the third quarter of 2019 which was recorded at US$ 41.05 million. This decrease was due to the decrease in revenue from vessel charter to US$ 30.08 million from US$ 38.58

million. Then, other shipping services recorded a decline to US$ 1.32 million from US$ 2.47 million. (Kontan.co.id).

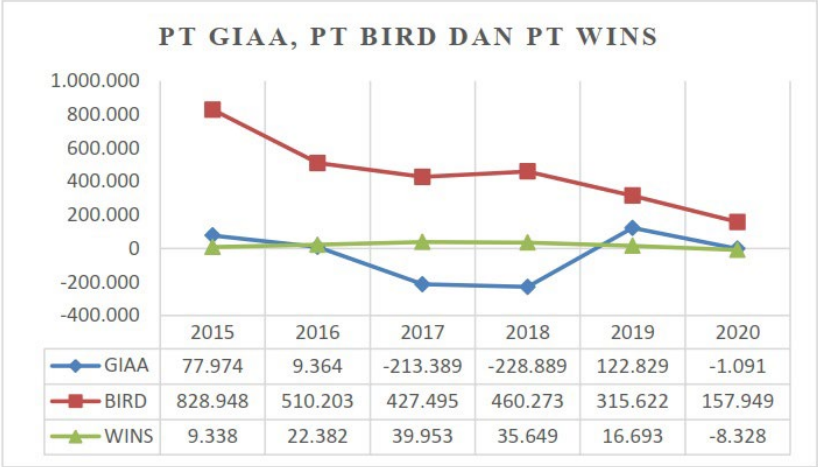

Figure 1. Revenues of PT GIAA, PT BIRD, PT WINS (2015 – 2020)

Figure 2. Infographics of ROA in the Transportation Sub-Sector (2015-2019)

From the graph above, it shows that the average ROA value of the Transportation Sub- Sector companies listed on the Indonesia Stock Exchange in 2015 was 7.86. In 2016, the average ROA value decreased to 6.12, and in the following year, 2017 the average ROA value in Transportation sub sector industry went through sloppy to 0.05, in 2018 it decreased again to (0.06). Then in 2019, the average ROA value for Transportation Sub-Sector companies listed on the IDX increased to (0.03).

Theoretically rapid lending growth results in higher risks for firms in subsequent years, implying that hasty asset structure funded by external lending policies cause firms to have worse solvency Farihah 2017), (Julita 2019) and (Salman 2019. When early studies examined further the capital structure, Farihah (2017) and Salman (2019) posit that debt to equity ratio has great impact on the profitability of firm, whereas Julita can not find the correlation between them. In different studies, Widiyanti and Elfina (2015), Farihah (2017) and Jufrizen et al. (2019), LDER (Long Term Debt to Equity Ratio) has no significant effect on profitability (ROA). In larger companies it will be easier to get external funds in the form of debt that will help its operational activities and increase company productivity so that company profitability will also increase. Studies from Iqbal and Zhuquan (2015, Meidiyustiani (2016, and Ali et al. (2018) shows that firm size has a significant effect on profitability (ROA). While research conducted by Aprilia and Kusumawati (2020) shows that company size does not have a significant effect on profitability (ROA).

As a result of firm's income, sales growth can measure the financial stability for firm. there is evidence that sales

growth has a strategic impact for the company because sales growth is marked by an increase in market share which will have an impact on increasing sales from the company so that it will increase the profitability. That sales growth can increase company profit (ROA) (Putra & Badjra, 2015), (Zhuquan 2015) and (Ali et al, 2018). On the other hand, Meidiyustiani (2016), Salman (2019), Aprilia and Kusumawati (2020) argue that sales growth does not have a significant effect on profitability (ROA).
Our current study investigates the profitability trend in transportation sub sector industry in Indonesia. Researchers have repeatedly been asking some questions like: Can profitability arise without being riskier? Is the growth of profitability related to higher or low leverage or the size of firm? What may be the correlation between sales growth and firm performance? We inspect the relationship between profitability and three essential dimensions: the leverage of firm, the firm size, and the income development. We rely on numerous analytical metrics for each of the three dimensions to identify the firm's profitability related to leverage, the firm size, and trend of sales.

1.1 Objectives

This study provides an in-depth analysis in transportation sub-sector industry in Indonesia. We try to capture firm factors particularly related to financial performance from capital structure framework, the size of firm and sales growth. Our research highlights to challenge current literatures. Also, to suggest firms to focus on how to maintain sounds balanced sheet. Some objectives developed to pursue the aim of our studies as follow:

- To analyze profitability of transportation industry in Indonesia
- To predict the effect of capital structure through firm leverage in Indonesia
- To examine how size of firm and sales growth contribute to profit generating in transportation industry
- To provide insight to firms in industry to have an eye for the sound of their capital structure to avoid potential default
- To give proposition to investors who will invest in transportation industry, to take into account firms leverage and their size

2. Literature Review

2.1 Financial Performance

According to Fahmi (2018: 142) financial performance is an analysis carried out tosee the extent to which a company has implemented it using financial implementationrules properly and correctly. A good company's financial performance is theimplementation of the applicable rules that have been carried out properly and correctly.

2.2 Financial statements

According to Hery (2016), financial statements are the final product of a series of processes for recording and summarizing business transaction data. An accountant is expected to be able to organize all accounting data to produce financial reports and even must be able to interpret and analyze the financial statements he makes.

2.3 Profitability

Profitability is a measure that is usually used in measuring performance measures in a company. To see the level of profitability, a company can use various methods depending on the size of the profits and capital assets compared to one another. This profitability provides an overview of how effectively the company operates so as to provide benefits for the company.

- Return on Asset (ROA)

According to Kasmir (2012:203), explaining that what affects *Return on Assets* (ROA) is the return on investment or what is referred to as *Return on Assets* (ROA) whichis influenced by net profit margins and total asset turnover because if ROA is low it is caused by low net profit margin due to low total asset turnover.

2.4 Leverage

According to Harahap (2013:106), leverage is a ratio that describes the relationship between the company's debt to capital, this ratio can see how far the company is financedby debt or external parties with the company's ability

described by capital. *Leverage* in this study is measured by *Debt to Asset Ratio* (DAR), *Debt to Equity Ratio* (DER), and *Long Term Debt to Equity Ratio* (LDER).

2.4.1 Debt to Asset Ratio (DAR)

According to Lukman Syamsuddin (2009: 54) states this ratio measures how much assets are financed by creditors. The higher the debt ratio, the greater the amount of loan capital used in generating profits for the company. According to Kasmir (2014, p.152) states that if the company turns out to have a high solvency ratio, this will have an impact on the risk of greater losses, but there is also an opportunity to earn a large profit. The higher the Debt to Asset Ratio indicates the higher the financial risk faced by the company because debt carries the consequence of a fixed interest expense.

2.4.2 Debt to Equity Ratio (DER)

Debt to Equity Ratio is a ratio used to measure how much total own capital is financed with *total debt*. This ratio is sought by comparing all debt, including current debt with allequity. This ratio is used to determine the amount of funds provided by the borrower (creditor) with the owner of the company. The higher the debt-to-equity ratio, the more the amount of debt or the company's obligation to pay off debts that must be paid both in the short and long term.

2.4.3 Long Term Debt to Equity Ratio (LDER)

This ratio isused to measure how big the comparison between long-term debt with own capital or howmuch long-term debt is guaranteed by own capital. According to Priyanto and Darmawan (2017) the ratio of long-term debt to capital is a ratio used to measure the proportion of long-term debt to capital. This ratio is useful for knowing the magnitude of the comparison between the amount of funds borrowed from the owner of the company

2.5 Firm Size

According to Brigham & Houston (2011:4) firm size is the size of the company whichcan be classified based on various ways, including the size of income, total assets and total equity. Basically, the size of the company is only divided into three categories, namely large companies (*Large Firms*), medium companies (*Medium Size*) and small companies (*Small Firms*). The bigger the company, the easier it will be to obtain external funds in the form of large amounts of debt so that it will help the company's operational activities and cause the company's productivity to increase so that the company's profitability will also increase. 2018)

2.6 Sales Growth

Above-average sales growth for a company is generally based on the expected rapid growth of the industry in which the company operates. Companies can achieve above- average growth rates by increasing their market share of overall industry demand. High sales growth indicates an increase in revenue earned by the company from product sales in the company's operational activities. Sales growth from the previous year on a regular basis can be used to predict sales growth in the coming year. However, it does not guarantee the amount of profit generated will increase. According to previous research, namely research conducted by (Meidiyustiani 2016), (Salman 2019) and (Aprilia and Kusumawati 2020) stated that sales growth did not have a significant effect on profitability.

Based on our explanation above, we proposed the following hypotheses:

a. H1a: Leverage (DAR proxy) has a significant effect to profitability (ROA)
b. H1b: Leverage (DER) proxy) has a significant effect on profitability (ROA).
c. H1c: Leverage (LDER proxy) has an effect significant to profitability (ROA).
d. H2: Firm size has a significant effect on profitability (ROA)
e. H3: Sales growth has a significant effect on profitability (ROA)

3. Methods

In this study using quantitative research methods, namely data measured in a numeric scale or numbers that can be calculated using documentation techniques obtained from the company's annual report. This research is causal associative, namely research that aims to determine the causal effect between two or more variables, namely independent or independent variables on the dependent or dependent variable (Gujarati, 2003).

3.1 Data Analysis Techniques

Data analysis in this study uses a quantitative approach which is stated in the annual financial statements of transportation sub-sector companies listed on the Indonesia Stock Exchange using the STATA 16 statistical program. STATA is a statistical program that is very complete in terms of statistical function capabilities, making it one of the most popular programs used by researchers from various circles for data processing or analysis. STATA is a statistical program that provides features that can be used to read data, create new variables, calculate statistical analyzes and draw graphs. We have developed the following model in line with our hypotheses:

Model 1

Leverage has effect on profitability (ROA)

$$ROA\ (Y1) = \alpha + \beta 1\ DAR + \beta 2\ DER + \beta 3 LDER + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(1)$$

Model 2

Firm size and sales growth have effect on profitability

$$ROA\ (Y2) = \alpha + \beta 1\ FSize + \beta 2\ Sales\ gro + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots..(2)$$

Model 3

We test all independent variables in one equation

$$\mathrm{ROA}(Y3) = \alpha + \beta 1\ DAR + \beta 2\ DER + \beta 3 LDER + \beta 1\ FSize + \beta 2\ Sales\ gro + \varepsilon \ldots\ldots\ldots\ldots.(3)$$

4. Data Collection

The data that will be used in this research is secondary data. The secondary data that will be used is data sourced from the financial statements of transportation sub- sector companies listed on the Indonesia Stock Exchange (IDX) in 2015-2019. The data was obtained from official sources, namely from summary reports on the performance of listed companies (financial data and ratios) and annual reports of companies in the transportation sub-sector listed on the Indonesia Stock Exchange for the 2015-2019 period, through the website www.idx.co.id.

The population in this study are Transportation Sub-Sector Companies listed on the Indonesia Stock Exchange for the 2015-2019 period. The total population is 42 companies. In this study using a purposive sampling method where companies that publish complete annual report statements for 5 consecutive years and can be accessed on the Indonesia Stock Exchange (IDX) in 2015-2019 are 26 companies.

5. Results and Discussion

5.1 Numerical Results

The analytical tools used in this study are the minimum value, maximum value,mean and standard deviation.

Table 1 Descriptive Result

Variable	Obs	Mean	Std. deviation	Minimum	Maximum
DAR	130	.6606083	.8250725	.0285143	8.307725
DER	130	1.69855	8.002675	-20.15659	82.37547
LDER	130	.7906513	2.272784	-4.232543	23.73071
Firm size	130	22.84767	4.126446	17.40222	29.20984
Sales growth	130	.4601878	4.259325	-1	42.18939
ROA	130	-1.5065	.601912	-2.838831	.3408466

Source: Data Processed STATA Statistics 16

5.2 Test Model

5.2.1 Chow test

To determine the most appropriate *fixed effect* or *common effect model* used in estimating panel data, the Chow test is carried out. if probability > 0.05 then the best estimation model used is *Common Effect Model* (CEM) if probability < 0.05 then the best estimation model used is *Fixed Effect Model* (FEM).

Table 2 Chow Test Results

Effect Test	Prob.
F (22,39)	5,08
Prob. > F	0,0000

Source: Data Processed STATA Statistics 16

5.2.2 Hausman test

To retest which model is better between *Fixed Effect Model* (FEM) or *Random Effect Model* (REM). If probability > 0.05 then the best estimation model used is *Random Effect Model* (REM). If probability < 0.05 then the best estimation model used is *Fixed Effect Model* (FEM).

Table 3 Hausman test results

Effect Test	Prob.
Prob. > Chi^2	0,0231

Source: Data Processed STATA Statistics 16

5.3 Panel Data Regression Analysis

The analysis technique used in this research is panel data regression analysis with *Fixed Effect Model* to describe the effect of *leverage*, firm size and sales growth on profitability (ROA).

Table 4 Results of Panel Data Regression Analysis (*Fixed Effect Model*)

Variable	Coef.	Std. Error	t	P > [t]
DAR	-.1253861	.120397	-1.04	0.304
DER	-.1292851	.1369375	-0.94	0.351
LDER	.208909	.2273204	0.92	0.364
Firm size	-.4603952	.1667626	-2.76	0.009
Sales growth	.0164254	.0182349	0.90	0.373
_cons	9.342093	3.9677	2.35	0.024

Source: Data Processed STATA Statistics 16

Table 5. Results from Model 1, Model 2 and Model 3

Variable	Model 1	Model 2	Model 3
DAR	0.221		
	.0908618		
DER	0.017		
	-.3112822		
LDER	0.040		
	.4508291		
	-1.56541		
Firm size		0.005	
		-.3415559	
Sales growth		0.356	
		.016898	
		6.418103	
DAR			0.304
			-.1253861
DER			0.351
			-.1292851
LDER			0.364
			.208909
Firm size			0.009
			-.4603952
Sales growth			0.373
			.0164254
			9.342093

Source: Data Processed STATA Statistics 16

it can be seen that the equation for panel data regression in this study is as follow

Model 1

$$ROA\ (Y1) = -1.56541 + 0.908618\ DAR - \ 0.3112822\ DER + \ 0.4508291 LDER + \ \varepsilon$$

Model 2

$$ROA\ (Y2) = \ 6.418103 - 0.3415559\ FSize + \ 0.016898\ Sales\ gro + \ \varepsilon$$

Model 3

$$ROA\ (Y3) = \ 9.342093 - 0.1253861\ DAR - 0.1292851\ DER + \ 0.208909\ LDER - 0.4603952\ FSize + \ 0.0164254\ Sales\ gro + \ \varepsilon$$

Wanner and Pevalin as quoted by Sembodo (2013) state that panel regression is a set of techniques to model the effect of explanatory variables on response variables in panel data. There are several panel regressions models, one of which is a model with a constant slope and a variable intercept. A panel regression model that is affected by only one unit (*cross-sectional* unit or time unit) is called a one-way component model, while a panel regression model that is affected by both units (*cross-sectional* unit and time unit) is called a two-way component model.
The author intends to test the variables separately because to determine the value of the panel data, which is a combination of *Cross Section* data and *Time Series* data on *leverage* variables, namely DAR, DER and LDER with 2 other independent variables, namely firm size and sales growth.

The results of model 1 from table 5 *leverage* using DAR proxy get a prob value of 0.221 ($p > 0.05$) it means Ho is accepted or Ha is rejected with path coefficient value .0908618, it means every 1 percent increase in DAR, the profitability value proxy ROA will increase by .0908618. Then on a leverage using DER proxy obtain a prob value of 0.017 ($p < 0.05$), it means Ho is rejected or Ha is accepted, the path coefficient value is -.3112822 which means that every 1 percent increase in DER, the profitability value proxy ROA will increase by -.3112822. Furthermore, on the leverage using LDER proxy obtained a prob value of 0.040 ($p < 0.05$) it means Ho is rejected or Ha is accepted, and the path coefficient value is .4508291, which means that every 1 percent increase in LDER, the profitability value proxy ROA will increase by .4508291. In model 1 using Common Effect Model (CEM).

The results of model 2 (see table 5 column 3) are 2 other independent variables, including firm size which obtains a probability value of 0.005, ($p < 0.05$), it means Ho is rejected or Ha is accepted, and the path coefficient value is -.3415559, which means that every 1 percent increase in firm size, the profitability value proxy ROA will increase by -.3415559. And sales growth which obtains a prob value of 0.356, ($p > 0.05$), it means Ho is accepted or Ha is rejected, and the path coefficient value is .016898, which means that every 1 percent increase in sales growth, the profitability value proxy ROA will increase by .016898, model 2 is using the *Fixed Effect Model* (FEM).

In model 3, we test all the hypotheses using Fixed Effect Model (FEM). As shown in table 5, DAR obtained prob results of 0.304, ($p > 0.05$) with path coefficient value is -.1253861, it means Ho is accepted or Ha is rejected and every 1 percent increase in DAR variable, the profitability value ROA proxy will increase by -.1253861. The prob results of variable of DER is 0.351, ($p > 0.05$) with path coefficient value is -.1292851, it means Ho is accepted or Ha is rejected, every 1 percent increase in DER variable, the profitability value ROA proxy will increase by -.1292851. On LDER variable obtained a prob value of 0.364, ($p > 0.05$) with path coefficient value is .208909, it means Ho is accepted or Ha is rejected and every 1 percent increase in LDER variable, the profitability value ROA proxy will increase by .208909. The prob value of firm size is 0.009, ($p < 0.05$) with path coefficient is -.4603952, it means Ho is rejected or Ha is accepted, every 1 percent increase in firm size, the profitability value proxy ROA will increase by -.4603952. And in sales growth, its prob value is 0.373, ($p > 0.05$), it means Ho is accepted or Ha is rejected, with path coefficient value is .0164254, every 1 percent increase in sales growth, the profitability value proxy ROA will increase by .0164254.

5.4 Analysis and Discussion on Findings for Hypothesis

Hypothesis 1a (H_{1a}): Leverage (DAR proxy) has a significant effect to profitability (ROA)

From the results of the partial test (t test) in model 1 and model 3, the results of the test on the DAR variable show that the probability value is above 0.05, which means that the *leverage* of the DAR proxy has no significant effect on profitability (ROA). H_{1a} is rejected.
From the measurement results above, it can be explained that if DAR shows a high value, then asset financing with debt for transportation sub-sector companies is quite high, so it will be difficult for companies to obtain additional loans. Where the company focuses on paying off debt from assets financed through the debt. Therefore, DAR does

not have a large impact on the high and low profits obtained by the company through the company's asset management (ROA). Because the smaller the number of assfinanced by capital, the greater or higher the risk of the company payingoff its obligations and the greater the interest burden on the debt owed by the company.
The results of this study are supported by research that has been carriedout by Widiyanti and Elfina (2015) which has the results that the *Debt to AssetRatio* does not have a significant effect on profitability (ROA) in the transportation sub-sector companies listed on the IDX for the 2015-2019 period

Hypothesis 1b (H_{1b}): Leverage (DER proxy) has a significant effect on profitability (ROA)
From the results of the partial test (t test) the test results show that the DER variable produces a probability value of 0.351 which means that 0.351 > 0.05, namely the DER has no significant effect on profitability (ROA), while in model 1 DER has a significant effect on profitability (ROA). So the insignificant effect from the measurement results above, it can be explained that the resultsof the insignificant effect of DER on profitability (ROA) show that the high and low DER does not have a major impact on the company's profitability (ROA), because the company focuses on capital obtained from debt or loans from outside parties or creditors. This can have a bad impact because it will pose a risk of failure of the transportation sub-sector company to pay off its debts, which also has an impact on the company's liquidity risk.
Meanwhile for the model 1 result, the high DER indicates the presence of large funds from debt sources that can be used in operations companies in increasing profitability. With the explanation above, it can be concluded that a very high DER will reduce the company's profitability due to the increase in interest costs and the risk of default, on the contrary if the DER increases properly it will help the company's operational funding capability in order to increase profitability.
The results of this study are supported by research conducted by Julita (2019) which has the results that the Debt to Equity Ratio does not have a significant effect on profitability (ROA) in transportation sub-sector companies listed on the IDX for the 2015-2019 period.

Hypothesis 1c (H_{1c}): Leverage (LDER proxy) has a significant effect on profitability (ROA)
From the results of the partial test (t test) the test results show that the LDER variable produces a probability value of 0.364 which means that 0.364 > 0.05, namely the *Long-Term Debt to Equity Ratio* has no significant effect on profitability (ROA). And in model 1 LDER has significant effect on profitability (ROA).
So, from the insignificant results above, it can be explained that the resultsof the insignificant effect of LDER on profitability (ROA) indicate high and low LDER does not have a major impact on company profitability (ROA). If the higher the LDER, it will show the respective capital as a guarantor of the company's long-term debt, then it will not have a major impact on increasingor decreasing the company's ability to generate profits.
Meanwhile for the significant result, the high LDER indicates the existence of large funds from debt sources that can be utilized in the company's operations to increase profitability. With the explanation above, it can be concluded that a very high LDAR will reduce the company's profitability due to the increase in interest costs and the risk of default, on the contrary if the LDER increases properly it will help the company's operational funding capability in order to increase profitability.
The results of this study are supported by research conducted by Widiyanti and Elfina (2015), Farihah (2017) and Jufrizen (2019), stating that the *Long-Term Debt to Equity Ratio* (LDER) does not have a significant effect on profitability (ROA).

Hypothesis 2 (H_2): Firm size has a significant effect on profitability (ROA)
From the results of the partial test (t test) in model 2 and model 3 show that the firm size value produces a probability value of 0.009, which means that 0.009 <0.05, which means that firm size has a significant effect on profitability (ROA). H_2 is accepted.
So from the measurement results above, it can be explained that this significant influence indicates that the greater the value of the company's size can increase profitability (ROA). On the other hand, the lower the firm size value, the lower the profitability (ROA). In other words, the higher the company's assets, the higher the profit that will be

obtained, because the assetsare used by the transportation sub-sector companies for their operational activities with the aim of generating profits. Transportation sub-sector companies that have large total assets reflect the company's strength.

The results of this study are supported by research conducted by Iqbal and Zhuquan (2015), Meidiyustiani (2016) and Ali et., al (2018), which state that firm size has a significant effect on profitability (ROA).

Hypothesis 3 (H_3): Sales growth has na significant effect on profitability (ROA)

From the results of the partial test (t test) in model 2 and model 3 show that the sales growth variable produces a probability value of 0.373 which means that 0.373 > 0.05, namely sales growth does not have a significant effect onprofitability (ROA). H_3 is rejected. The trend in the 2015 - 2019 period shows sales growth is increasing, however the company's profitability has decreased and this result shows that sales growth is not the main factor that can affect profitability (ROA), because sales growth is accompanied by increased costs and greater asset additions, so that the expected increase in profitability (ROA) is not achieved

The absence of a significant influence between sales growth onprofitability (ROA) could be due to sales this year being smaller than the previous year. This is due to a decrease in sales, so that sales growth gets insignificant results. The results of this study are supported by research conducted by Meidiyustiani (2016), Salman (2019) and Aprilia and Kusumawati (2020), stating that sales growth does not have a significant effect on profitability (ROA).

6. Conclusion

Identification of factors effecting firm profitability has been a central theme in economics, management, accounting and corporate finance because good management improves financial performance of the firms and consequently stabilize the economy of a country. This paper investigated whether firm – specific factors impact on profitability, using data of listed firms in transportation industry in Indonesia, over the period 2015 – 2019. Most of previous research conducted in this area has included in consumer goods sector, construction, and manufacture. We first, develop panel data analysis based on financial performance indicator, then we develop equation into 3 models, to get better examination of its impact on profitability.

From our results suggest that firm size is the most significant factor that plays its role to determine profitability in transportation sector, where some of the ratio in leverage such as DER and LDER become the second most significant factor. The results also reveal that sales growth does not give big effect on the profitability trend in the firms. Our paradoxical results that contradict previous results from different industries call for attention of researchers and principal to investigate the fundamental factors that could improve financial profitability and develop some useful polices to minimize the negative impact of external fund for operations. Because these variables can be used by investors as material for consideration before investing in the company. if these variables are in optimal conditions, the operational performance and profitability will increase. For investors, in determining a financial strategy, they can consider funding decision factors related to the portion of debt, company size and sales. Investors should be careful investing in companies with high debt and low company size and sales because they have a high risk of bankruptcy. Investors are more advised to choose to invest in large companies that are more established in terms of total assets and companies that have a good level of profitability.

In sum, our findings suggest that sound balance sheets confer performance power on firms, which, consequently, are better able better able to survive and sustain the business. This evidence challenges the assumptions of theoretical models that assume sales growth can elevate firm's profitability (Putra & Badjra, 2015). Our findings shed light on why sales growth does not appear to adversely affect bank profitability. We show that sales growth has little effect because they increase firms' cost of hoarding liquidity and because the increase in sales was accompanied by an increase in costs and the addition of greater assets, so that the expected increase in profitability (ROA) was not achieved, in addition to the decrease in sales, so that sales growth received insignificant results. By managing the liquidity, activity, cost efficiency well thus offsetting the lower income from the sales activity.

Our paper also contributes to a growing literature scrutinizing the decision-making policy regarding investment activity through their equity structure and asset structure. We show that some indicators in equity structure indicate strong relationship with profitability. The use of debt in a company will increase profits, due to an increase in taxes

which is a deduction for the cost of debt, but at a certain point the use of debt can reduce profits because of the influence of bankruptcy costs and interest costs arising from the use of debt. Ultimately, there is still few studies scrutinizing transportation sector, as this industry is high cost with enormous demand from society as the user, many investors drawn to open new transportation company nevertheless earn less in the end.

Study Recommendation

For future studies in this area: first, more accurate findings will be acquired if the study involves some other variables such as corporate governance mechanisms such as board committee meetings, the salary of directors, the audit committee size, the system for nominating directors, multiple directorships and standard policies and macro factors. Secondly, it will be more beneficial if the study uses z variable like moderating variable or intervening variable that are thought to affect profitability and can use other sectors with quarterly or annual periods.

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