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| **RESEARCH ARTICLE**

Determinants of Change of Board of Directors in Transportation Sector Companies on the Indonesia Stock Exchange

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| **ABSTRACT**
The purpose of this study was to determine the factors that affect the change of directors. The independent variables used in this study consisted of the effective tax rate (ETR), price to book value (PBV), and net profit margin (NPM). The population in this study amounted to 28 companies in the transportation sector on the Indonesia Stock Exchange and only 22 issuers who were sampled using the purposive sampling method related to the criteria for issuers to have been listed on the stock exchange before 2019. The form of this research is the associative test. The data analysis technique used logistic regression analysis. The results of the study were processed with the help of SPSS version 25 and showed that the level of profitability as measured by the net profit margin had a negative effect on the turnover of directors, while the effective tax rate and firm value proxied by price to book value had no effect on the decision to change directors.

| **KEYWORDS**

Change Of Directors, Company Performance, Effective Tax Rate, Price To Book Value, Net Profit Margin, Company Value, Profitability

1. Introduction
One of the goals the company established is to achieve the expected goals, including maximizing the value of the company, earning profits, and maintaining the company's survival (going concern). The company's goals can be achieved if it has competent human resources and is managed by good management. A company in the form of a PT (Limited Liability Company) is run and managed by a board of directors. The board of directors is fully responsible for achieving the company's vision and mission and must also be accountable for its performance to the principal (shareholders). Given that the principal buys the behavior of the agent, the contract based on the agent's behavior is most efficient (Visintin, Pittino, & Minichilli, 2017).

In the event that the company's performance is deemed to be declining or not developing as expected by the stakeholders, the directors can be dismissed at any time according to the decision of the General Meeting of Shareholders (Article 105 of the Company Law). Change of the board of directors (management turnover) is one of the corporate actions that is expected to be able to bring the company to achieve the goals that have been set and will also be responded to by the capital market both negatively and positively. A positive response will be obtained if the signal sent and received by the market is that the replaced directors are considered to have good performance or the newly appointed directors are considered to have a better reputation and competence. Given the important role directors play in modern corporations; it's important to understand how new boards should be formed and what company members are more likely to join the new board (Li & Ruth V. Aguilera, 2008).

The board of directors is usually appointed and dismissed at the GMS, including unplanned dismissals (Yucha, 2018). Many factors can influence an entity to change directors, including decreased company performance, experiencing financial distress, management being considered inefficient in spending costs, declining stock prices, and so on. In this study, the authors use the factor of tax payments (ETR), firm value, and the level of profitability as variables in management turnover. To provide a general

description of the frequency of changes in the board of directors in the transportation sector on the Indonesian Stock Exchange, the following is presented in Table 1:

Table 1. Turnover Management Data Year 2019-2021

Information	2019	2020	2021
The number of companies that make changes of directors	13	9	9
Number of companies that do not change directors	9	13	13
Number of companies	22	22	22
% of companies that change the board of directors	**59,09**	**40,91**	**40,91**

Source: processed data, 2022.

Based on Table 1, it can be seen that every year issuers of the transportation sector quite often change directors with a ratio between 40 percent to 60 percent. The number of changes in the board of directors is quite large; of course, it is interesting to explore the cause. Based on the description of the research background presented, the purpose of this study was to determine the effect of the effective tax rate, firm value, and profitability on the decision to change directors.

2. Theoretical Study and Hypotheses
2.1 Change of Directors
According to article 1 number 5 of the Company Law number 40 of 2007: "The Board of Directors is a Company Organ that is authorized and fully responsible for the management of the Company for the benefit of the Company, in accordance with the purposes and objectives of the Company and represents the Company, both inside and outside the court in accordance with the provisions of the law. articles of Association." Based on the meaning above, it can be said that the board of directors is the highest level of operational management in a company. Shareholders always assess the leadership of top managers as agents who have the authority and responsibility to act on behalf of the company to then decide whether to continue to retain or dismiss top managers. (Andriani & Sinabutar, 2020).

The social dynamics of the board are likely to play a central role in the director turnover rate (Garg, Li, & Shaw, 2018). The achievement of the company's targets and objectives is influenced by the ability and competence of the board of directors. Identifying the disciplinary role of the owner can be seen from the managerial turnover (Jostarndt & Sautner, 2008). If the company's performance is good, the board of directors will generally get a reward; otherwise, if it is considered not performing, the majority shareholder, through the GMS, can change the board of directors. The change of directors is measured by a dummy variable (Yucha, 2018), namely:

• Code 1: if there is a change of directors, and

• Code 0: if there is no change of directors

2.2 Effective Tax Rate
For companies, paying taxes is a burden, so management is required to be able to carry out tax management to minimize tax payments, but of course, by not violating existing tax regulations. In general, the company will pay taxes if the company has a taxable profit. Fiscal profit is profit calculated in accordance with tax provisions. The effective tax rate (ETR) is a useful tool for making comparisons between different tax systems (Panteghini, 2012).

Tax expense is divided into two, namely current tax expense and deferred tax. Current tax expense is the amount of income tax payable on taxable income for a period (PSAK 46 paragraph 25). The current tax burden can be seen from the amount of income tax payable in the 1771 Annual SPT. The current tax burden can have a minimum value of nil (0). This can happen because the taxable income is minus (fiscal loss) or when the taxable profit still has compensation for losses whose value is greater than the fiscal profit in a period. The current tax burden is the result of multiplying the taxable income with the corporate income tax rate. The corporate income tax rate applicable in Indonesia in 2019 is 25 percent and starting in 2020, it will decrease to 22 percent.

Unlike current tax expense, deferred tax can be deferred tax expense (if the value is positive) and become deferred tax income (if the value is negative). Deferred tax expense occurs when there is a positive fiscal correction at different times, or there is compensation for losses. On the other hand, deferred tax income occurs when there is a negative correction at the time difference. The sum of current tax expense and deferred tax is tax expense.

For the cash cost approach, in this study, the company's effective tax rate only uses parameters on the current tax burden. The high effective tax rate of the company reflects the inability of top managers to minimize taxes, so top managers are considered

responsible for the decline in shareholder wealth caused by the high taxes paid by the company (Andriani & Sinabutar, 2020). According to Tanujaya and Valentina (2020: 6), the effective tax rate is obtained by the following calculation:

Effective Tax Rate = Current tax expense / Profit before tax.

The greater the value of the effective tax rate indicates that the company pays more taxes or the lower the tax savings, thus encouraging the company to change directors. Thus, the relationship between the ratio of the effective tax rate and tax payments to the potential for a change of directors is positive, so a hypothesis can be formulated that the effective tax rate has a positive effect on the turnover of directors.

H1: The effective tax rate has a positive effect on the change of directors.

2.3 Company Value
At this time in the 4.0 revolution era, the value of the company is the main goal of establishing a company where sometimes a company, although it is known to suffer losses, is still run, like a start-up company, even though it suffers losses and as long as it is able to reap more users, the valuation can be increased (company value increases). On the other hand, the tax benefits of debt have a positive impact on firm value (Khan, Qureshi, & Davidsen, 2021). Termination of underperforming managers is considered a corrective action intended to ensure that management behavior is consistent with shareholder wealth maximization (Werema, 2018). Firm value can be measured by various approaches, one of which is the ratio of price to book value (Weston & Copeland, 2001).

Price to book value = share price/book value of shares.

The higher the price to book value, the more valuable the company is. High price to book value can be caused by increasing stock prices. If the company's stock price tends to rise, then management is considered to be performing well so that the opportunity to be replaced is smaller than issuers whose share prices tend to fall. On the basis of these considerations, the authors propose the second hypothesis, namely, the value of the company has a negative effect on the turnover of directors.

H2: Firm value has a negative effect on the turnover of directors.

2.4 Profitability
In addition to benefiting from capital gains, if one day the shareholders sell their shares, many shareholders also expect dividends. The dividend is the distribution of profit to shareholders. Companies that want to continue to survive (going concern) should be profitable companies. The company's performance in making a profit is a basic indicator to assess the competence of the management led by the board of directors. At the corporate level, executive managers and the board of directors are responsible for the strategic success and financial success of a business (Barber, Ghiselli, Deale, & Whithem, 2009). Positive profit based on the effect of profitability at the aggregate level can affect the market reaction (Yoshinaga & Nakano, 2021).

Net profit margin is the ratio of profitability associated with the company's sales. The higher the net profit margin ratio, the better the company's ability to generate profits. This accounting ratio provides information to explain accounting performance, while better accounting performance can reduce the tendency of resignations of directors that are mandatory or voluntary (Lindrianasari & Nurdiono, 2010). Menurut Kasmir (2018) *net profit margin* count with:

Net Profit Margin = Profit After Tax / Sales.

The relationship between profitability and turnover of directors should be negative, meaning that the higher the profitability, the smaller the chance of a change of directors and conversely, the smaller the profitability (even loss), the pressure to reshuffle the board of directors tends to be higher. According to Firth, Fung, & Rui (2006), it is stated that the possibility of top management turnover is higher for companies that have lower profitability. Based on the description that has been submitted, the authors propose a hypothesis that profitability has a negative effect on the turnover of directors. This hypothesis is in line with the results of research conducted by Yucha (2018).

H3: Profitability has a negative effect on the change of directors.

3. Research Methods
The form of research used in this study is associative research because it examines the effect of the independent variable on the dependent variable. The dependent variable in this study is the change of directors, while the independent variables in this study consist of the effective tax rate, the value of the company as measured by price to book value, and profitability as proxied by the net profit margin. The research model in this study can be seen in Figure 1 below:
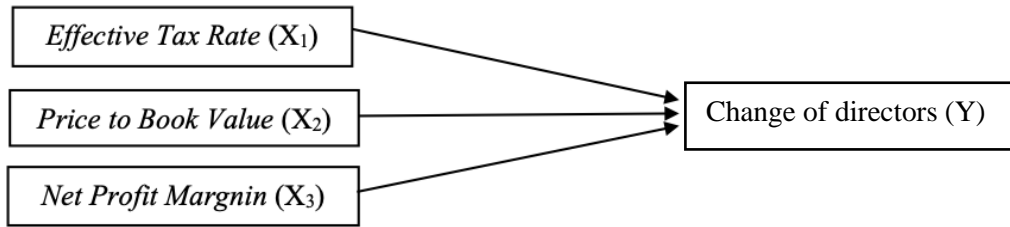
Source: Literature Review, 2022

Figure 1. Research Model

This study uses a documentary study on research data in the form of audited financial statements obtained from issuers' publications on the Indonesia Stock Exchange. The population in this study were 28 issuers, and after purposive sampling was carried out with two criteria, namely companies that had conducted initial public offerings (IPOs) before 2019, 22 issuers were obtained, and due to using data for three years, the number of research data was 66 data.

To determine whether there is an effect of the independent variable on the dependent, this study uses logistic regression. Logistic regression is a regression in which the dependent variable is a binary variable (only two possible answers). Prior to the logistic regression testing, this study started with descriptive statistical analysis, which provided an overview of the research data in general (mean, highest, lowest, and standard deviation). The second stage is a multicollinearity test to test whether there is a correlation between independent variables (it is said to be multicollinearity free if the VIF value is < 10). The third stage is a feasibility test of the model with the indicator value of Hosmer and Lemeshow Goodness of-fit test statistic > 0.05; then, the model is said to be feasible (Ghozali, 2016).

In the fourth stage, the overall fit model is tested with an indicator value of -2logL. A good model is a decrease in the initial and final values. The fifth stage is followed by the analysis of the coefficient of determination (Negelkerke R), where the value obtained is closer to one, and the more independent the independent variable is able to predict the value of the dependent variable. The sixth stage is a classification matrix analysis to calculate the percentage of correct and incorrect estimation accuracy. The last stage is closed with logistic regression analysis using the following equation:

$$\text{Ln}\frac{PD}{1-PD} = b0 + b1\,ETR + b2\,PBV + b3\,NPM + \in$$

Information:

$\text{Ln}\frac{P}{1-P}$	= Probability to change directors
b0	= Constant
b1, b2, b3, b4	= Regression Coefficient
ETR	= *Effective Tax Rate*
PBV	= *Price to Book Value*
NPM	= *Net Profit Margin*
€	= Error

4. Results and Discussion
4.1 Descriptive Statistics

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ETR	66	-,6259	15,1560	,576930	2,2430152
PBV	66	-40,7412	26,1332	1,635200	6,7004076
NPM	66	-3,7346	25,9690	,114418	3,3199896
Valid N (listwise)	66				

Source: Processed data SPSS 25, 2022.

From Table 2, it can be seen that the lowest effective tax rate (ETR) of -0.6259 is data from TNCA issuers in 2020; a negative effective tax rate value indicates that the issuer and its subsidiaries still owe taxes, even though the cumulative commercial profit is still negative. This often happens because tax payments are made per company (per central NPWP) while commercial profit/loss is a consolidated value. The highest effective tax rate value is the result of the calculation of BLTA issuers in 2019, where the current tax burden is Rp. 12,983,968,601, - and commercial profit before tax is Rp. 856,691,136, - then the effective tax rate is 15.15. This happens because, in the consolidated statements, there are subsidiaries that suffer losses, and there is no payment of current tax, but there are profits. For current tax expense, if it is not paid, it is considered zero (not minus), but for a commercial profit before tax, it is still added.

Furthermore, for the variable firm value proxied by price to book value (PBV), the minimum value is -40.74; this happens because SDMU issuers in 2021 have negative equity (negative BVPS Rp1.66) while the share price is Rp68 (in general, the minimum share price is Rp50 per share). The largest valuation in the study was 26.13 times for TNCA issuers in 2021. The profitability variable, as measured by net profit margin (NPM), also has a negative value which means that there are companies that experience losses; the average net profit margin value is 11 44 percent.

The dependent variable is a dichotomous variable, so descriptive statistics are presented in a different way because there are only two possibilities, the presence or absence of a change of directors.

Table 3. Descriptive Statistics of Board of Directors Change Variables Change of Board of Directors

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Change of Board of Directors	35	53,0	53,0	53,0
	There is a Change of Directors	31	47,0	47,0	100,0
	Total	66	100,0	100,0	

Source: Processed data SPSS 25, 2022.

Based on the data in Table 3, it is known that overall the company very often changes directors (by 47 percent), which is obtained from 31 changes of directors in 66 possibilities.

4.2 Multicolinenaris Test

Table 4. Multicholienarity Testing

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	,438	,065		6,790	,000		
	ETR	,047	,027	,210	1,721	,090	,999	1,001
	PBV	,005	,009	,062	,507	,614	,986	1,015
	NPM	-,027	,019	-,180	-1,470	,147	,986	1,014

a. Dependent Variable: Pergantian Direksi

Source: Processed data SPSS 25, 2022.

Based on the data in Table 4, it can be concluded that the three free variables (ETR, PBV, and NPM) are free from the symptoms of multicollienarity because none of the VIF values exceeds the value of 10 in each variable.

4.3 Testing of Model Regression

Table 5. Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	5,826	7	,560

Source: processed data SPSS 25, 2022.

Based on the data in Table 5, it can be concluded that the model is considered feasible because the significant value in the *Hosmer and Lemeshow Test* exceeds 0.5, which is 0.56.

4.4 Assessing the Fit Model and the Overall Model (Overall Model Fit)

Table 6. LIKELIHOOD BLOCK 0

Iteration History[a,b,c]

Iteration		-2 Log likelihood	Coefficients Constant
Step 0	1	91,253	-,121
	2	91,253	-,121

a. Constant is included in the model.

b. Initial -2 Log Likelihood: 91,253

c. Estimation terminated at iteration number 2 because parameter estimates changed by less than ,001.

Source: SPSS processed data, 2022.

Table 7. LIKELIHOOD BLOCK 1

Iteration History[a,b,c,d]

Iteration		-2 Log likelihood	Coefficients			
			Constant	ETR	PBV	NPM
Step 1	1	85,136	-,248	,188	,019	-,109
	2	82,280	-,343	,323	,022	-,297
	3	78,809	-,562	,494	,029	-,862
	4	78,383	-,617	,602	,031	-1,130
	5	78,366	-,626	,629	,031	-1,196
	6	78,366	-,627	,630	,031	-1,200
	7	78,366	-,627	,630	,031	-1,200

a. Method: Enter

b. Constant is included in the model.

c. Initial -2 Log Likelihood: 91,253

d. Estimation terminated at iteration number 7 because parameter estimates changed by less than ,001.

Source: SPSS processed data, 2022.

Based on the data in Table 7 shows the final Likelihood where the *value of -2Log Likelihood* indicates a value of 78.366. The value decreased compared to the initial *-2Log likelihood* value of 91,253. This decrease in value can mean that the addition of free variables, namely ETR, PBV, and NPM, to the model can improve the *fit* model as well as show a better regression model.

4.5 Coefficient of Determination

Table 8. Nagelkerke R Square

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	78,366[a]	,177	,237

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than ,001.

Source: processed data SPSS 25, 2022.

Based on the test results shown in Table 8, the value of *Nagelkerke R square* is 0.237, which means that the variability of the dependent variables that can be explained by independent variables is 23.7 percent, while the rest is explained by other variables outside the research model.

4.6 Classification Matrix

Table 9. Classification Matrix

Classification Table[a]

	Observed		Predicted		
			Pergantian Direksi		Percentage Correct
			Tidak ada Pergantian Direksi	Ada Pergantian Direksi	
Step 1	Pergantian Direksi	Tidak ada Pergantian Direksi	30	5	85,7
		Ada Pergantian Direksi	19	12	38,7
	Overall Percentage				63,6

a. The cut value is ,500

Source: SPSS Processed Data 25, 2022.

Based on Table 9, which has been presented, shows the predictive power of the regression model to predict the probability that the company will not change directors by 85.7%. This shows that by using the regression model, the companies that are predicted to change directors are as many as 5 companies out of a total of 35 companies that do not change directors. The predictive power of the regression model to predict the probability that the company will change directors is 38.7 percent. This means that with the regression model, the companies that are predicted not to change directors are 19 companies out of 31 companies that do change directors.

4.7 Logistic Regression Analysis

Table 10. Logistic Regression Analysis

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	ETR	,630	,492	1,642	1	,200	1,878
	PBV	,031	,046	,447	1	,504	1,031
	NPM	-1,200	,586	4,192	1	,041	,301
	Constant	-,627	,320	3,846	1	,050	,534

a. Variable(s) entered on step 1: ETR, PBV, NPM.

Source: Processed data SPSS 25, 2022.

In testing the relationship between ETR and change of directors, it is in the direction of the prediction, which has a positive relationship, but is not significant (significance more than 0.05). This shows that the ratio of tax payments is not the main reason for changing directors. Based on the existing data, it can be explained that there are 17 research data from 66 data, which shows that the current tax burden is nil, so there is no tax burden paid.

Testing the second hypothesis about the relationship between firm value as proxied by price to book value (PBV) on the turnover of directors obtained insignificant results where the value of sig. 0.504 or greater than 0.05. These results indicate that stock price fluctuations are not a determinant of the replacement of directors, the argument used to explain this finding can be seen from the existing data that there are 7 companies that have experienced negative equity, so if they demand an increase in stock prices, it is certainly not logical. Stock prices are influenced by a variety of complex factors, so they cannot be delegated to the board of directors immediately.

Testing the last hypothesis about the relationship between profitability as measured by net profit margin (NPM) on the turnover of directors obtained results in accordance with the hypothesis that was built where the relationship was negative and significant (sig. 0.04). These results indicate that companies whose profits fall tend to change directors and vice versa; if their profits increase, then the directors will be retained.

5. Conclusions and Recommendations

This study was conducted to examine whether there is an effect of the effective tax rate (ETR), firm value (PBV), and profitability (NPM) on the turnover of directors in transportation sector companies. The results of the logistic regression test show that only the profitability variable (NPM) has an effect on the decision to change directors, while the other two indicators, namely the effective tax rate (ETR) and firm value (PBV), are not the reasons used to determine the change of directors. This study still has limitations where in measuring the change of directors, it is always assumed because of performance, it could be because the directors have entered retirement age or because of their own volition, so that further researchers can sort out only using forced management turnover which can measure the change of directors variable.

Conflicts of Interest: The authors declare no conflict of interest.

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