

Moderation Effects of Tax Planning on the Effect of Incentives Tax, Financial Distress, and Women Directors on Earnings Management: A Case Study on Registered Transportation and Logistics Sector in Indonesia Stock Exchange in 2020-2021)

Lu'lu'ul Jannah¹, Erni Hernawati²

^{1,2}Universitas Citra Media Nusantara, Indonesia

luluul.jannah@mncu.ac.id, ernihernawati67@gmail.com

Abstract

This study examines the moderating effect of tax planning on the impact of tax incentives, financial distress, and women directors on earnings management. The sample of this research is transportation and logistics companies listed on the Indonesia Stock Exchange for the observation year 2020-2021. The number of samples that meet the criteria is 42 samples. The variable used in this study is the dependent variable, namely earnings management; the independent variable is tax incentives, financial distress, and women directors, while the tax planning variable is the moderating variable. The analytical method used in this study follows the pattern of the Structural Equation Modeling (SEM) equation model. The data analysis tool uses STATA (Statistics and Data). The results showed that financial distress affected earnings management. In contrast, other variables did not affect earnings management.

Keywords

Covid-19; transportation, tax incentives; financial distress, women directors



I. Introduction

The outbreak of the 2019 Coronavirus (Covid-19) has had an impact on several sectors. One of the sectors affected is the transportation and logistics sector. The government has taken policies to prevent the spread of Covid-19, especially those related to transportation and travel. The government at both the central and regional levels has taken steps to control traffic and limit the number of passengers to prevent the spread of Covid-19 policies set by the Government harm the transportation and logistics sector. The negative impacts experienced by the transportation sector start from restrictions on transportation modes, a decrease in revenue flow, reduction of employees, losses, and even the possibility or risk of bankruptcy (Ministry of Finance, 2021). The decrease in cash flow experienced by transportation companies is called financial distress. Financial distress is the condition of a company experiencing a financial decline before bankruptcy occurs (Selahudin et al., 2014). The outbreak of this virus has an impact of a nation and Globally (Ningrum et al, 2020). The presence of Covid-19 as a pandemic certainly has an economic, social and psychological impact on society (Saleh and Mujahiddin, 2020). Covid 19 pandemic caused all efforts not to be as maximal as expected (Sihombing and Nasib, 2020).

The government has made a tax incentive policy to reduce the impact of the Covid-19 pandemic. This is under Minister of Finance Regulation Number 44/PMK.03/2020 concerning Tax Incentives for Taxpayers Affected by the 2019 Corona Virus Disease Pandemic (Minister of Finance of the Republic, 2020). The tax incentives given to

companies in the transportation and logistics sector are expected to save the industry. Companies also need to do proper planning in responding to these uncertain conditions. The board of directors in the company can do tax planning. The female board of directors is the proper party in making planning policies.

Based on agency theory, management and company owners seek to increase profits for each party. Planning by the board of directors can create agency problems. The board of directors can make plans that are beneficial to management. In the planning process, the board of directors can perform earnings management for personal interests. However, the female board of directors is expected to be able to prevent and reduce motivation to practice earnings management; this is because women are more careful, avoid risks, and have high ethical standards.

II. Review of Literature

2.1 Tax

Incentives Tax incentives are a form of tax facility the government provides certain taxpayers. This facility is in the form of a reduction in tax rates which aims to reduce the amount of tax burden that must be paid by the company. Tax incentives encourage companies to invest (Jafri & Mustikasari, 2018). Earnings management carried out by the company can be influenced by the provision of incentives. Incentives can be in the form of tax incentives and non-tax incentives. Tax incentives arise when companies consider taxes as a component of costs that will reduce company profits and encourage companies to manipulate financial statements so that the taxes paid can be minimized (Zhafirah, 2019).

H1: Tax incentives have a significant effect on earnings management

2.2 Financial Distress

Financial distress is when a company is experiencing financial difficulties (Sucipto & Zulfa, 2021). Financial distress is characterized by the uncertainty of the company's profitability in the future. In addition, the company's financial condition was problematic before the company went bankrupt. The company cannot fulfill its obligations due to a lack of funds to continue the business (Puri & Gayatri, 2018), so the financial distress that occurs in the company can influence the management to practice earnings management (Setyaningrum et al., 2019). If the company experiences financial distress, management tends to do earnings management by beautifying the company's financial statements. In addition, management performs earnings management to make financial difficulties in a company invisible.

H2: Financial distress has a significant effect on earnings management

2.3 Women Directors

Companies that have female directors indicate that the company does not discriminate against anyone to occupy important positions in the company. The existence of female directors influences the policies taken by the company. Women have a significant negative influence on earnings management (Santana & Wirakusuma, 2016). So that female directors may be able to reduce earnings management behavior in the company. This is because women are more cautious, risk-averse, and have higher ethical standards to prevent and reduce motivation to perform earnings management. The role of women on the board of directors can limit the practice of earnings management.

H3: Women directors have a significant effect on earnings management

2.4 Tax Planning

Tax planning is a plan carried out by the company in fulfilling tax obligations. Tax planning arises because of differences in interests between the company and the government. The difference in interest lies in the condition of taxes as a burden for companies while taxes as revenues for the government to fund state expenditures. The higher the tax planning, the more excellent the opportunity for the company to practice earnings management. Management conducts tax planning to reduce the tax burden by reviewing the company's profit as a tax base. This is supported by research by Santana & Wirakusuma (2016), which states that tax planning has a positive effect on earnings management.

The Covid-19 pandemic, which impacted the transportation and logistics sectors, resulted in several companies experiencing financial distress. So that the government takes a policy of providing tax incentives to restore the economy and increase tax revenues by the state. Financial distress factors and tax incentives need full attention from management. Management can do tax planning to address financial distress and tax incentives. Female directors, as the company's management, can carry out tax planning well. This is because women tend to be more able to plan carefully and be more careful.

In addition to the impact of the Covid-19 pandemic, it turns out that these two factors, namely financial distress and tax incentives, are factors that influence management to manage earnings. When the company is experiencing financial distress, the company tends to do earnings management so that the company's financial problems are not seen by stakeholders. The tax incentives received by the company also trigger management to carry out earnings management because this tax incentive is based on the amount of profit earned. So that the tax planning carried out by management can strengthen or weaken the effect of tax incentives, financial distress, and women directors on earnings management.

H4: Tax incentives affect earnings management with tax planning as a moderating variable

H5: Financial distress affects earnings management with tax planning as a moderating variable

H6: Women directors affect earnings management with tax planning as a moderating variable

2.5 Earnings

Management Earnings management is condition management intervenes in preparing financial reports for external parties so that they can even out, increase, and decrease profits (Santana & Wirakusuma, 2016). Earnings management is an effort by company managers to intervene or influence the information in financial statements, which aims to deceive stakeholders into knowing the performance and condition of the company. Earnings management is seen as an action that should not be done by managers. By practicing earnings management, the information provided does not fully reflect the state of the company, so it can cause stakeholders to make inappropriate decisions (Kamil, 2018).

Table 1. State of the Art

No	Journal Title	(Author, Published Year): Name of the Journal	Differences in Research that Becomes the Basis of Research
1	<i>Women directors, firm performance, and firm risk: A causal</i>	(Yang et al., 2019); The Leadership Quarterly	This does not include tax planning variables, tax incentives, financial distress, and

	<i>perspective</i>		earnings management
2	<i>Earnings management, business strategy, and bankruptcy risk: evidence from Indonesia</i>	((Dian Agustia,* Nur Pratama Abdi Muhammad, 2020); Heliyon Journal	This does not include tax planning variables, tax incentives, financial distress, and women directors
3	<i>The moderating effect on the board of directors on firm value and tax planning: Evidence from European listed firms</i>	(Khaoula & Moez, 2019); Borsa Istanbul	Excluding tax incentives, financial distress, women directors, and earnings management variables
4	Effect of tax incentives and non-tax incentives on earnings management	(Ayu, 2019); Proceeding of National Conference on Accounting & Finance	It does not include financial distress, tax planning, and women directors' variables
5	The effect of financial distress on earnings management with corporate governance moderation	(Tannaya & Lasdi, 2021); Accounting Student Scientific Journal	It does not include tax incentives, tax planning, and women directors

Based on the hypothesis built from a literature review and state of the art, the following framework was developed in this study.

III. Research Method

The population in this study are all companies listed on the Indonesia Stock Exchange (IDX). The sampling technique used purposive sampling, which is based on specific criteria. The criteria for determining the sample are transportation and logistics companies listed on the IDX in 2020-2021. The dependent variable in this study is earnings management. The independent variables in this study are tax incentives, financial distress, and women directors. The moderating variable in this study is tax planning.

Table 2. Operational Variables and Measurement

Measured Variables	Indicator	Scale
Earnings Management (Y)	<i>Discretionary Accrual (DA) modified Jones Model</i>	Ratio
Tax Incentive (X_1)	$TAXPLAN = \frac{Tarif\ PPh \times (PTI - CTE)}{Total\ Aset}$	Ratio
Financial Distress (X_2)	$Z - Score = 1,2X_1 + 1,4X_2 + 3,3X_3 + 0,6X_4 + 1,0X_5$	Ratio
Women Directors (X_3)	The ratio between the number of female directors and the total number of directors	Ratio

<i>Tax Planning (M)</i>	$ETR = \frac{\text{Beban Pajak Penghasilan}}{\text{Laba Sebelum Pajak}}$	Ratio
-------------------------	--	-------

The analytical method used in this study follows the pattern of the Structural Equation Modeling (SEM) equation model. The data analysis tool uses STATA (Statistics and Data). Data analysis using SEM was carried out to thoroughly explain the relationship between variables in the study. The research model used to measure the influence between variables is as follows:

MLit = 0 + 1IPit + 2FDit + 3WDit + ε..... Model 1

MLit = 0 + 1IPit + 2FDit + 3WDit + 4TPit + 5IP*TPit + 6FD*TPit

+ 7WD*TPit Model 2

Description:

ML : Earnings management

IP : Tax incentives

FD : Financial distress

WD : Women directors

TP : Tax planning

IP*TP : Interaction between tax incentives and tax planning

FD*TP : Interaction between financial distress and tax planning

WD*TP : Interaction between women directors and tax

planning : Error

IV. Result and Discussion

4.1 Statistics Description

Table 3. Statistics Description

Variable	Obs	Mean	Std. dev.	Min	Max
ML	42	-0.0002172	0.020446	-0.0525729	0.0516773
IP	42	0.0124178	0.0702446	-0.0838932	0.4150194
FD	42	4.580826	12.36646	-11.13198	58.84167
WD	42	0.1170635	0.1886512	0	0,5
TP	42	0.3152466	1.210945	-0.5638792	7.813433

All variables were carried out by observing a sample of 42 samples. The earnings management variable has an average value of -0.0002172 with a standard deviation of 0.020446, the tax incentive variable has an average value of 0.0124178 with a standard deviation of 0.0702446, the financial distress variable has an average of 4.580826 with a standard deviation of 12.36646, the women director variable has an average of 0.1170635 with a standard deviation of 0.1886512, and the tax planning variable has an average of 0.3152466 with a standard deviation of 1.210945.

4.2 Classical Assumption Test

a. Normality Test

Table 4. Normality Test

Skewness and kurtosis tests for normality					
Variable	Obs	Pr(skewness)	Pr(kurtosis)	Joint test	
				Adj chi2(2)	Prob>chi2
Res	42	0.2072	0.1714	3.71	0.1564

Normality test is done by using skewness and kurtosis test. This normality test is seen from the value of Prob>chi2. If the value is above 0.05, then the residual value in the data is said to be expected. The value of Prob>chi2 indicates a value of 0.1564. This means that the normality test is met.

b. Heteroscedasticity Test

Breusch-Pagan/Cook-Weisberg test for heteroskedasticity

Assumption: Normal error of ML

Variable: Fitted value of ML

H0: Constant variance

chi2(1) = 0.95

Prob > chi2 = 0.3286

Figure 1. Heteroscedasticity Test Results Heteroscedasticity

The test was carried out using the Breusch-Pagan/Cook-Weisberg test. This test is said to be free of heteroscedasticity if the Prob>chi2 value is above the 0.05 significance value. Based on the results of the heteroscedasticity test, the data is said to be free from heteroscedasticity. This is because Prob>chi2 shows a value of 0.3286.

c. Multicollinearity Test

Table 5. Multicollinearity Test Results

Variable	VIF	1/VIF
FD	1.03	0.975316
WD	1.02	0.983389
IP	1.01	0.991617
Mean VIF	1.02	

The multicollinearity test was tested using VIF or Variance Inflation Factor. The independent variable is said to have no multicollinearity if the VIF is below the value of 10. Based on the data in table 5, the independent variable does not occur in multicollinearity.

4.3 Hypothesis Testing

a. Model 1

Table 6. Hypothesis results of model 1

ML	Coefficient	Std. err.	T	P> t	[95% conf. interval]	
IP	-0.0065598	0.0439736	-0.015	0.882	-0.0955796	0.0824601
FD	0.0006154	0.0002519	2.44	0.019	0.0001055	0.0011253
WD	-0.0096951	0.016442	-0.59	0.559	-0.0429801	0.02359
_cons	-0.0018198	0.0037573	-0.48	0.631	-0.0094262	0.0057865

Table 6 contains the results of hypothesis testing 1 to 3. The hypothesis is supported if the Prob value in the table is below the significance level of 0.05. Based on the results of hypothesis testing in Table 6, only the 2nd hypothesis is supported, while the first and third hypotheses are not. Hypothesis 2 that is supported that financial distress has a significant effect on earnings management.

b. Model 2

Table 7. Hypothesis results of model 2

ML	Coefficient	Std. err.	T	P> t	[95% conf. interval]	
IP	0.0364195	0.0503823	0.72	0.475	-0.0659697	0.1388086
FD	0.0004243	0.0004209	1.01	0.320	-0.0004309	0.0012796
WD	-0.0065211	0.0176428	-0.37	0.714	-0.0423755	0.0293334
TP	0.0072578	0.0167289	0.43	0.667	-0.0267394	0.041255.
IPTP	-1.418275	0.7501318	-1.89	0.067	-2.942726	0.1061766
FDTP	0.0002505	0.0010106	0.25	0.806	-0.0018034	0.0023044
WDTP	-0.0429627	0.0606471	-0.71	0.484	-0.1662125	0.0802871
_cons	-0.0026508	0.0052383	0.51	0.616	-0.0079946	0.0132963

Table 7 contains the results of hypothesis testing 4 to 6 or hypotheses for moderating variables. The hypothesis is supported if the Prob value in the table is below the 0.05 significance. Based on the results of hypothesis testing in table 7, all hypotheses 4, 5, and 6 are not supported. This is because the Prob value is above the significance value of 0.05.

Table 8. Determination test

R-squared	0.2798
Adj R-squared	0.1316

Table 8 contains the result of determination test. The determination value of 13.16%. The independent variable affects the dependent variable only by 13.16%. So that there are still 86.84% of variables outside this study can be used for further research.

V. Conclusion

The results of hypothesis testing state that only the second hypothesis is supported, namely, financial distress has a significant effect on earnings management. Financial distress experienced by companies in the transportation and logistics sector is characterized by the uncertainty of the company's profitability in the future. This is due to the Covid-19 condition, which causes uncertainty in the future. This causes problems in the company, namely the company's inability to fulfill obligations due to a lack of funds to continue the business (Puri & Gayatri, 2018). So that the financial distress that occurs in the company can influence the management to practice earnings management (Setyaningrum et al., 2019). If the company experiences financial distress, management tends to do earnings management by beautifying the company's financial statements. In addition, management performs earnings management to make financial difficulties in a company invisible. At the same time, other hypotheses are not supported. The explanation of this is the first hypothesis; namely, tax incentives do not affect earnings management. This is because the tax incentives that are not too large received by this sector do not cause companies to carry out earnings management. The third hypothesis is that women directors do not affect earnings management. This is supported by the nature of women who are more careful in acting and do not like risk, so earnings management is not carried out by the company because earnings management is too risky to do. For the fourth, fifth, and sixth hypotheses, namely the tax planning variable as a moderating variable, it does not weaken or strengthen the influence of the independent variable on the dependent variable. This is because tax planning is not carried out when the company experiences financial distress and gets tax incentives. Meanwhile, earnings management is also not carried out by a

female board of directors because women are more cautious and avoid risk. The reason that tax planning does not affect strengthening and weakening independent variables on earnings management is that the purpose of transportation and logistics companies to carry out earnings management is to avoid a decrease in profits, while the purpose of tax planning is to reduce the amount of taxable profit (Rioni & Junawan, 2021).

This study has limitations in the sample used. This study only uses samples in the transportation and logistics sector and the addressing period is only two years, namely 2020-2021. So that further research can expand the sample and year of observation as well as other variables that have not been studied in this study, as evidenced by the small determination value of 13.16%. So that there are still 86.84% of variables outside this study can be used for further research.

References

- Ayu, BDP (2019). The Effect of Tax Incentives and Non-Tax Incentives on Earnings Management. Indonesian Islamic University, 4(1986), 154. <https://doi.org/10.20885/ncaf.vol4.art37>
- Dian Agustia, * Nur Pratama Abdi Muhammad, and YP (2020). Earnings management, business strategy, and bankruptcy risk: evidence from Indonesia. Heliyon, 6(2). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7005427/>
- Finance. (2021). Recording the Covid-19 Pandemic and Understanding the Hard Work of State Budget Guards. <https://www.kemenkeu.go.id/media/18295/buku-record-pandemi-covid-19-dan-memahami-kerja-cepat-pengawal-apbn.pdf>
- Jafri, HE, & Mustikasari, E. (2018). The Effect of Tax Planning, Tunneling Incentives and Intangible Assets on Transfer Pricing Behavior in Manufacturing Companies with Special Relationships Listed on the Indonesia Stock Exchange for the 2014-2016 Period. Indonesian Accounting and Finance Periodic, 3(2), 63. <https://doi.org/10.20473/baki.v3i2.9969>
- Kamil, I. (2018). PROFIT MANAGEMENT PRACTICE CONCEPT IN STUDENT ETHICAL PERCEPTION (Case Study at XYZ University). Profita Journal, 11(1), 053. <https://doi.org/10.22441/profita.v11.01.004>
- Khaoula, F., & Moez, D. (2019). The moderating effect of the board of directors on firm value and tax planning: Evidence from European listed firms. Borsa Istanbul Review, 19(4), 331–343. <https://doi.org/10.1016/j.bir.2019.07.005>
- Minister of Finance of the Republic, I. (2020). PMK 44/PMK.03/2020 concerning Tax Incentives for Taxpayers Affected by the 2019 Corona Virus Disease Pandemic. 19, 115.
- Ningrum, P. A., et al. (2020). The Potential of Poverty in the City of Palangka Raya: Study SMIs Affected Pandemic Covid 19. Budapest International Research and Critics Institute-Journal (BIRCI-Journal) Volume 3, No 3, Page: 1626-1634
- Puri, AR, & Gayatri, G. (2018). Good Corporate Governance Moderates the Effect of Financial Distress on Earnings Management. E-Journal of Accounting, 2018(1), 489–512. <https://doi.org/10.24843/EJA.2018.v23.i01.p19>
- Rioni, YS, & Junawan. (2021). The Effect of Tax Planning on Earnings Management in Non-Manufacturing Companies Listed on the Indonesia Stock Exchange. Journal of Business & Public Accounting, 11(2), 116–126. <https://jurnal.pancabudi.ac.id/index.php/akuntansibisnisdanpublik/article/view/3928>
- Saleh, A., Mujahiddin. (2020). Challenges and Opportunities for Community Empowerment Practices in Indonesia during the Covid-19 Pandemic through

- Strengthening the Role of Higher Education. Budapest International Research and Critics Institute-Journal (BIRCI-Journal). Volume 3, No 2, Page: 1105-1113.
- Santana, DKW, & Wirakusuma, MG (2016). The Effect of Tax Planning, Managerial Ownership and Firm Size on Earnings Management Practices. Udayana University Accounting E-Journal, 14(3). <https://doi.org/10.37932/jev8i2.40>
- Selahudin, NF, Zakaria, NB, & Sanusi, ZM (2014). They are remodeling the Earnings Management with the Appearance of Leverage, Financial Distress, and Free Cash Flow: Malaysia and Thailand Evidences. In Journal of Applied Sciences (Vol. 14, Issue 21, pp. 2644–2661). <https://doi.org/10.3923/jas.2014.2644.2661>
- Setyaningrum, GC, Sekarsari, PSS, & Damayanti, TW (2019). The Influence of Female Executives on Earnings Management. Journal of Economics and Banking, 4(1), 98–110. <http://e-journal.stie-aub.ac.id/index.php/probank>
- Sihombing, E. H., Nasib. (2020). The Decision of Choosing Course in the Era of Covid 19 through the Telemarketing Program, Personal Selling and College Image. Budapest International Research and Critics Institute-Journal (BIRCI-Journal) Volume 3, No. 4, Page: 2843-2850.
- Sucipto, H., & Zulfa, U. (2021). The Influence of Good Corporate Governance and Company Size on Earnings Management. Diponegoro Journal of Accounting, 4(3), 1–17.
- Tannaya, CIN, & Lasdi, L. (2021). Effect of Financial Distress on Earnings Management With Good Corporate Governance as Moderating Variable. 10(1). <https://doi.org/10.33508/jima.v10i1.3453>
- Yang, P., Riepe, J., Moser, K., Pull, K., & Terjesen, S. (2019). Women directors, firm performance, and firm risk: A causal perspective. Leadership Quarterly, 30(5), 101297. <https://doi.org/10.1016/j.leaqua.2019.05.004>
- Zhafirah, A. (2019). Analysis of Determinants of Financial Distress. Analysis of Determinants of Financial Distress, 7(1), 195–202. <https://doi.org/10.17509/jrak.v7i1.15497>