



<https://ejournal.ibik.ac.id/index.php/riset>

JURNAL APLIKASI EKONOMI AKUNTANSI DAN BISNIS

E-ISSN : 2656-7113 P-ISSN : 2797-4057 DOI : doi.org/10.37641/riset.v4i2.172

THE EFFECT OF FINANCIAL DISTRESS AND TAX LOAD ON TAX INCENTIVE PARTICIPATION PROGRAMS AFFECTED BY THE COVID-19 PANDEMIC

Trisno Yuwono¹⁾, Dyah Purwanti²⁾

^{1, 2)} Polytechnic of State Finance STAN

E-mail: trisno@pknstan.ac.id¹⁾, dyahpurwanti@pknstan.ac.id²⁾

ARTICLE INFO

THE EFFECT OF FINANCIAL DISTRESS AND TAX LOAD ON TAX INCENTIVE PARTICIPATION PROGRAMS AFFECTED BY THE COVID-19 PANDEMIC

Submitted:

21 – July – 2022

Revised:

23 – August – 2022

Accepted:

27 – September – 2022



ABSTRACT

During the Covid-19 pandemic, The Government of Indonesia implemented tax incentive programs for taxpayers affected by Covid-19. This study examines several factors that affect companies' participation in tax incentives, while The population data used consists of 139 companies listed on the Indonesia Stock Exchange. The data is secondary data from quarterly and financial reports of the listed firm on the Indonesia Stock Exchange. This study employs logistic regression analysis to examine the motivation to participate in the program. Our findings relieve that financial distress motivates the companies to engage in the tax incentive program. On the other hand, the tax burden positively affects the company's participation in the tax incentive program.

Keywords: Financial Distress, Tax Burden, National Economic Recovery Program, Covid-19, Tax Incentive

INTRODUCTION

In April 2020, the International Monetary Fund (IMF) projected that global economic growth would experience a negative contraction of three percent (3%) caused by the Coronavirus Disease (Covid-19) pandemic (Gopinath, 2020). The IMF also mentioned the emergence of the threat of an economic downturn caused by several factors of uncertainty, such as activity restrictions (lockdown), supply disruptions, changes in spending patterns and behavior, and commodity price volatility. Indonesia the Government of Indonesia, has implemented a Large-Scale Social Restriction (Social Distancing) policy since April 2020. This policy includes restrictions on social activities outside the home, such as restrictions on activities in public places or facilities such as

education, offices, and factories¹. This policy has a significant impact on population mobility. The application of Social Distancing has broad implications for the production, distribution, marketing, and other economic activities². In the end, the Covid-19 pandemic caused the Indonesian economy to contract to (minus) 2.07% in 2020 (Bank Indonesia, 2020).

The decrease in productivity also has implications for the decline in company revenue (Yunianto, 2020). At the end of 2020, the Central Statistics Agency surveyed 34,559 respondents from micro, small and large enterprises (MSLE). At the same time, large medium enterprises (LME) showed that 82.85% of business units experienced a decline in income. The decrease resulted in the disruption of cash outflows for operating expenses that were not proportional to the cash inflows from revenues. This imbalance triggers a reasonably high increase in debt, causing financial difficulties for the company. Even the Association of Indonesian Issuers said that more than 50 companies on the Exchange began to experience cash flow difficulties due to the economic downturn during the pandemic (Sidik, 2020).

Furthermore, to overcome the economic downturn, the Government of Indonesia intervened by providing financial policy support through the National Economic Recovery Program. One of the critical policies in the National Economic Recovery Program is the provision of tax incentives for taxpayers affected by the pandemic. The rules regarding tax incentives for taxpayers affected by the Covid-19 pandemic were regulated for the first time in Minister of Finance Regulation Number 23 of 2020 and came into effect on April 1, 2020. Until March 2021, the achievement of taxpayer participation was still too low. As an illustration, the number of MSME taxpayers who participated in the tax incentive program was only equivalent to 10.74% when compared to the number of MSME taxpayers who made tax payments throughout 2019³.

Tax incentive policies are often used by the government as an instrument to induce economic behavior, to compensate investors for the inefficiency of the tax system, and for specific other purposes. Zelekha & Sharabi (2012) suggest that tax incentives reduce recipients' tax burden. The participation of companies in the tax incentive program is essential to support the acceleration of the National Economic Recovery Program. Companies that have met the requirements are given a choice to participate or not participate in the tax incentive program. Since participation in the program is optional, the company will consider the costs and benefits to be received in deciding whether to participate. However, the low interest of business plays a role in taking advantage of the tax incentives offered by the government creates an opportunity to investigate the causes.

The lack of use of tax incentives during the Covid-19 pandemic in Indonesia is contradictory to previous empirical evidence. Rodgers & Hambur (2018) studied the

¹ The implementation of Social Distancing in Indonesia is regulated in Government Regulation (PP) no. 21 of 2020. This Social Distancing was implemented for the first time in DKI Jakarta. Which is the epicenter of the spread of Covid-19 in Indonesia. This Social Distancing is one of the government's efforts to break the chain of the spread of Covid-19. After DKI Jakarta, Minister of Health Terawan also approved several other areas. It is noted that there are five areas in West Java adjacent to DKI Jakarta that have implemented Social Distancing, namely Bogor Regency, Bogor City, Depok City, Bekasi Regency, and Bekasi City, since April 15, 2020 (Indonesiabaik.id, 2021) at <https://indonesiabaik.id/infografis/penerapan-psbb-di-sejumlah-wilayah-indonesia>).

² The Indonesian Textile Association (API) noted that as many as 17.7% of the total members, or equivalent to 50 companies, have reduced production utilities by more than 50% since May 2020 (Yunianto, 2020).

³ The Ministry of Finance noted that as many as 286 thousand taxpayers had taken advantage of tax incentives, with details of 65,350 taxpayers taking advantage of Article 25 Income Tax Installment incentives. While 14,877 take advantage of Article 22 Import Income Tax incentives, 248,275 MSME taxpayers take advantage of Final Income Tax borne by the government incentives. Throughout 2020, the government allocated a ceiling of IDR 2.4 trillion for the final PPh incentives for SMEs borne by the government, but it was later revised to IDR 1.08 trillion. Until the end of 2020, the realization of tax incentives was IDR 670 billion or 62.03% (Kurniati, 2021).

effect of investment tax incentives in Australia during the global crisis in 2018. The study concluded that companies are very responsive to the offer of tax incentives. It is evidenced by the significant increase in investment flows by companies in Australia after the implementation of tax incentives in December 2018. The research also indicates that tax incentive policies are more effective in crises, especially when companies experience financial difficulties. These incentives are driven by the desire to get additional free cash flow from tax savings for investment activities (Richardson et al., 2015).

In addition to the financial difficulty factor, tax incentive policies are more effective because the company is experiencing a liquidity crisis (Rodgers & Hambur, 2018). Relaxation of taxation rules benefits companies by reducing tariffs, delaying tax payments, and eliminating tax debts for the previous period (Zwick et al., 2017). Companies with a more significant amount of tax liability tend to participate in tax incentive programs. Savings in the amount of tax payment obligations obtained from participation in the tax incentive program are considered benefits, so they are considered following the company's goal of maximizing the benefits that can be enjoyed.

After referring to the lack of use of tax incentives during the pandemic, the study investigates whether financial difficulties and tax burdens encourage business plays a role to take advantage of tax incentives. In order to deepen the analysis, this study uses the difference in difference (DiD) method to analyze the impact of the Covid-19 pandemic on the tax incentive program. The purpose of using DiD is to estimate changes that occur in groups of companies affected by the Covid-19 pandemic (treatment group) before and after the implementation of the tax incentive policy compared to changes that occur in groups not affected by the Covid-19 pandemic (control group). This grouping of samples of companies into affected groups is to distinguish the response of companies that have been significantly affected in their operations due to the Covid-19 pandemic from less affected companies.

Several studies have analyzed tax incentives during the Covid-19 pandemic. Fidiana (2021) conducted a literature study to examine tax policy during the Covid-19 pandemic through the perspective of the taxation principles proposed by Adam Smith, which include equity, certainty, convenience, and efficiency. Okafor et al. (2019) found evidence that tax incentives during the crisis positively affected small business plays a roles business continuity. Kartiko (2020) explicitly discusses tax incentives in Indonesia's tourism sector. The study concludes that tax incentives in the form of Article 21 Income Tax Borne by the Government are beneficial in reducing termination of employment for employees working in the tourism sector. In contrast, tax incentives in reducing installments of Income Tax number 25 and Final Income Tax borne by the government are beneficial in maintaining stability. Tourism business cash flow.

A similar study that took the period before the pandemic, namely Putra & Solikin (2018), conducted a study on the evaluation of the shipbuilding industry's tax allowance policy in Indonesia using the Dunn approach. The aspects studied include effectiveness, efficiency, adequacy, fairness, responsiveness, and feasibility. The results of these studies include providing recommendations for policy improvements such as simplification of requirements and aspects of certainty to get tax incentives. Zwick et al. (2017) on companies in America found evidence that companies experiencing financial difficulties reacted more to tax incentives. The research findings also state that companies only react to tax incentives that provide tax debt reductions in the current year.

Research on the factors or determinants that affect taxpayer participation in the tax incentive program was conducted, among others, by Ahmar et al. (2018) regarding participation in tax incentive programs. The study explains that the company's cash flow, risk level, and asset intensity affect the company's decision to participate in the asset revaluation program. Pratama (2018)'s research on the determinants that affect the participation of companies listed on the stock exchange in the tax amnesty program shows that all independent variables, namely tax avoidance, ownership structure, and corporate governance, have a significant influence on decisions to participate in tax amnesty. Research on the participation of taxpayers in the tax amnesty program was also conducted by Kuncoro et al. (2020), which concluded that tax audits, tax avoidance, and corporate risk have a significant positive effect on taxpayer participation in the tax amnesty program.

Decision theory states that company managers carry out the decision-making process by considering the benefits and costs incurred from making decisions. Edwards et al. (2016) stated that the condition of financial difficulties has implications for changes in company policies related to tax payments. The increasing cost of capital and reduced access to funding encourage management to delay or avoid paying tax obligations, especially when the company's tax burden can result in significant cash outflows.

Research conducted by Richardson et al. (2015) states that companies experiencing financial difficulties, especially in crises, will tend to avoid tax obligations and use the additional benefits of tax avoidance for alternative funding sources for their operational activities. Okafor et al. (2019) state that in a global crisis where access to credit is limited, companies can still seek alternative low-cost external funding such as financial incentives funded by the public sector or apply for tax incentives. Tax incentives during the Covid-19 pandemic in tax reductions or exemptions can be an alternative solution for companies to fulfill their tax obligations by minimizing the company cash flow pressure. Therefore, the first hypothesis in this study is:

H₁ = Companies experiencing financial difficulties tend to participate in tax incentive programs for taxpayers affected by the Covid-19 pandemic.

Assidi et al. (2016) show that managers are looking for strategies to reduce the tax burden to optimize company performance, as reflected in company profits. Large companies are also considered to have the resources to carry out particular strategies such as tax planning to reduce the tax burden (Stamatopoulos et al., 2016). In the Covid-19 pandemic situation, where the company's cash flow has decreased, the tax burden is considered by management to make efforts to minimize cash outflows from tax payments, such as doing tax planning. Therefore, we suspect that companies with a high tax burden will participate in tax incentive programs to reduce the tax burden but in a way that is safer for the company's reputation. Thus the second hypothesis in this study is:

H₂ = Companies with a high tax burden tend to participate in tax incentive programs for taxpayers affected by the Covid-19 pandemic.

METHOD

This study aims to examine the relationship between financial difficulties and tax burden on the tendency of companies to participate in tax incentive programs for taxpayers affected by the Covid-19 pandemic. The subjects in this study were

companies listed on the Indonesia Stock Exchange. The study was conducted on all sectors that comply with the Classification of Business Fields. It is listed in the attachment to the Regulation of the Minister of Finance, which regulates tax incentives for taxpayers affected by the Covid-19 pandemic. Sector classification refers to the Jakarta Stock Exchange Industrial Classification (JASICA). There are nine sectors, namely various industries; consumer goods industry; primary and chemical industry; infrastructure, utilities, and transportation; finance; trade, services, and investment; mining; agriculture; and property, real estate, and construction.

The object of this research is the company's participation in reducing Income Tax 25 installments, and relevant data is obtained from the company's financial statements for 2020. The criteria for companies affected by the Covid-19 pandemic are obtained from information disclosure reports submitted by issuers to the Indonesia Stock Exchange regarding the material facts of the impact Covid-19 pandemic. The secondary data sources in this study were obtained from financial reports and Material Information or Facts Reports on the Covid-19 pandemic's impact on companies listed on the Indonesia Stock Exchange.

This research is limited to companies that meet the predetermined criteria, following the Classification of Business Fields as listed in the attachment to the Regulation of the Minister of Finance, which regulates tax incentives for taxpayers affected by the Covid-19 pandemic. Companies that do not meet the criteria are excluded as research samples include companies registered after 2019, companies with negative earnings before tax in 2019, and companies with incomplete data regarding the variables used in the study. Table 1 below presents the sample selection process used in this study.

Table 1. Sample Selection

Description	Amount
Company registered until July 2021	747
Subtracted by:	
The company does not include KLU PMK-110	156
Companies with a negative 2019 ETR	220
Companies whose data are not obtained or incomplete	232
Companies that are the object of research	608
Number of test periods	3
Total population of the research object	139
Group	
Treatment Group (60 x 3)	180
Control Group (79 x 3)	237

Source: Data processed

Hypothesis testing in this study was carried out by logistic regression and using the difference in difference (DiD) method to strengthen the relationship between variables. Logistic regression is usually used when the dependent variable is dichotomous. Meanwhile, the difference in difference method is one of the most frequently used methods in impact evaluation studies by combining comparisons between groups before or after an event and control groups or groups affected by an event.

This study refers to the research model Fredriksson & Oliveira (2019) used, which uses the difference in difference (DiD) method. This study's dummy variables consist of

POST, *TREAT*, and *POSTTREAT*. This study examines the relationship between financial difficulties and the tax burden on taxpayer participation in tax incentive programs during the Covid-19 pandemic with the following equation model:

$$IP = \beta_0 + \beta_1 POST_i + \beta_2 TREAT_i + \beta_3 POSTTREAT_i + \beta_4 FD_i + \varepsilon + \beta_5 CTTOR_i + \beta_6 SIZE_i + \beta_7 ROA_i + \varepsilon$$

Information:

- IP* = Company's participation in the tax incentive program, measured using a dummy variable; "1" for companies participating in tax incentives throughout 2020; "0" for companies not participating in tax incentives
- POST* = The dummy variable for the quarterly reporting period throughout 2020, influenced by the tax incentive program, is worth 1 for the second and third quarters after the tax incentive program and 0 for the 1st quarter before the tax incentive program.
- TREAT* = Variable dummy treatment group up and control group up, worth 1 for companies affected by the Covid-19 pandemic and 0 for companies not affected by the Covid-19 pandemic
- POSTTREAT* = *POST* multiplication operation with *TREAT*
- FD* = Financial distress, as measured by the Altman Z-Score
- CTTOR* = The tax burden, measured by the *CTTOR* ratio ratio
- SIZE* = Firm size, the normal logarithm of total assets
- ROA* = Profitability, measured by the *ROA* ratio
- ε = error

The *POST* variable is the time variable for applying the rules regarding tax incentives, which is worth "1" for the quarter after the enactment of the tax incentive rules and is worth "0" for the quarter before the enactment of the tax incentive rules. The *TREAT* variable is a variable that explains the average difference between groups affected by the Covid-19 pandemic (treatment group) and groups not affected (control group). The *TREAT* variable is worth "1" for companies affected by the Covid-19 pandemic (treatment group) while "0" for companies not affected by the Covid-19 pandemic (control group).

The *POSTTREAT* variable is an interaction between the time variable and the group variable so that it becomes an estimator of the difference between the treatment group and the control group before and after applying the tax incentive rules. The *POSTTREAT* variable is generated by multiplying the *POST* and *TREAT* variables. The variable *POSTTREAT* has a value of "1" for companies affected by the Covid-19 pandemic for the period. Then the temporary tax incentive rules and a value of "0" for companies not affected by the Covid-19 pandemic either before or after implementation and for companies affected by the Covid-19 pandemic before implementation of tax incentive rules.

RESULTS

This study displays data in the form of the number of observations, the average (mean), the lowest value (minimum), the highest value (maximum), and the standard deviation of each research variable. The average value (mean) is a number that represents a group of data as a whole. The minimum value is the lowest extreme value

of the data, and the maximum value is the highest extreme value of the data. At the same time, the standard deviation is the distribution of data that shows the distance of individual data points to the average value (mean).

Table 2. Descriptive Statistics

<i>Variable</i>	<i>Obs</i>	<i>mean</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>
<i>Continuous:</i>					
				0	
FD	417	2 . 3708	2.0170	0.03802	7.4783
CTTOR	417	1.4056	1.6315	- 0.8950	5.0765
SIZE	417	14.9651	1.5848	12.3513	17.2486
ROA	417	1.2913	3.4815	-5.8881	9.4723
<i>Dummy:</i>					
	N	Value 1		Value 0	
IP	139	60 (43.16%)		79 (56.84%)	
TREAT	139	76 (54.67%)		63 (45.33%)	

Source: Data processed

The dependent variable in this study is the participation of companies listed on the IDX in the tax incentive program for taxpayers affected by the Covid-19 pandemic. Table 2 shows that as many as 60 companies participated in the tax incentive program throughout 2020. Meanwhile, 79 companies, or 56.84% of the total research population, did not provide information regarding participation in the tax incentive program, so it was assumed that they did not participate in it after it was done first. They were testing the calculation of Income Tax number 25 installments as stipulated in the Regulation of the Minister of Finance Number 215 of 2018 regarding the calculation of the installments of Income Tax 25 for companies listed on the stock exchange.

Based on Table 2, the average value (mean) of the financial distress variable is 3.4. The financial difficulty variable was measured using the Altman Z-Score ratio. Companies are classified as having financial difficulties if the Altman Z-Score ratio value is less than 1.81 and is declared healthy if the Z-Score ratio is above 2.99. Hence, the average value of the financial distress variable in the population of this study indicates that the company does not experience financial difficulties. However, when viewed in detail per sector, there are four sectors, namely the financial sector, property sector, infrastructure sector, and mining sector, which have a Z-Score ratio below 1.88, indicating financial difficulties. PT. MD Pictures Tbk is a company with the highest Z-Score ratio in the trade, services, and investment sectors.

The average value (mean) of the tax burden variable in the study population is positive 0.83, and the maximum value of the tax burden variable in this study is 8.64, which PT Gihon Telekomunikasi Indonesia Tbk owns with the telecommunications infrastructure sector. The CTTOR ratio uses income tax payable, calculated from taxable income multiplied by the applicable tax rate, so that if the company experiences a loss, the income tax payable is zero. Thus the tax burden has a minimum value of zero.

The dependent variable in this study is the participation of companies listed on the IDX in the tax incentive program for taxpayers affected by the Covid-19 pandemic. The dependent variable is binary or dichotomy, namely participating or not participating. Hypothesis testing in this study using logistic regression analysis refers to Hosmer et al. (2013), who states that logistic regression analysis is used to explain the relationship of the dependent variable. That is dichotomous or binary with the independent variable in

the form of interval or category-scale data. Logistic regression analysis does not require the classical assumption test because the dependent variable is binary, so the assumptions of the least squares model (normality, linearity) are ignored (Fernandes et al., 2020). Gujarati (2022) also states that logistic regression ignores the problem of heteroscedasticity, the Hypothesis testing in this study includes; the coefficient of determination test, simultaneous significance test, partial significance test, model feasibility test, and model prediction accuracy test. The results of the logistic regression test are listed in Table 3 below.

Table 3. Logistics Regression Results

	Coefficient	Odds Ratio	Std. Err	P> z
POST	-0.1998	0.8188	0.3132	0. 601
TREAT	0.2031	1.2253	0.5215	0.633 _
POSTTREAT	0.3675	1.4441	0.7502	0.479 _
FD	-0.0139	0.9861	0.0159	0.388 _
CTTOR	0.7939	2,2120	0.3477	0. 000
SIZE	-0.0365	0 . 9641	0. 0680	0. 605
ROA	0.2315	1. 2605	0 . 0560	0. 000

Obs = 417

LR Chi2 = 154.53

Prob>chi2 =0,000

Pseudo R2 = 0.2775

Source: Data processed

In the logistic regression analysis, the coefficient of determination used is Pseudo R Squared to measure the model's ability to explain variations in the dependent variable. In Table 3, it is explained that the Pseudo R Squared value is 0.2775. These results indicate that the independent variable in the model can explain 27.75% of the variation of the dependent variable, and the rest is explained by other variables not included in the research model.

For the partial test, the effect of each independent variable can be seen from the comparison of the probability value (F-statistic) to the significance level. If the probability value (F-statistic) is smaller than the significance level, then H_0 is rejected and H_a accepted, and vice versa. Table 3 shows that Prob = 0.000 is smaller than the significance level (0.05), so H_0 is rejected and H_a accepted. Testing for the first hypothesis (H_1) shows that the probability value after being divided by two (one-tailed) still has a higher value than the significance value (>0.05), so that H_0 can not be rejected. The direction of the variable coefficient of financial distress is negative. The logistic regression results on the partial test of the financial difficulty variable indicate that financial difficulty has no relationship to the tendency of companies to participate in tax incentive programs.

The second hypothesis (H_2) in this study proposes H_a temporary conjecture regarding the tendency of companies with a high tax burden to participate in tax incentive programs. Based on Table 3, which shows that the probability value has a lower value than the significance value (<0.05) so H_0 is rejected. The direction of the variable coefficient of the tax burden is positive. The logistic regression results on the partial test of the tax burden variable show that the tax burden strengthens the tendency of companies (taxpayers), it is used to participate in tax incentive programs.

DISCUSSION

Financial Difficulties are a Driving Factor for Using Tax Incentives During The Pandemic

The regression results show that financial difficulties partially do not affect the tendency of companies to follow tax incentives. The first hypothesis (H_1) of this study which expects that companies experiencing financial difficulties tend to follow tax incentives, cannot be proven. The results of this study are not in line with Zwick et al. (2017) and Edwards et al. (2016), which state that financial difficulties affect the tendency of tax incentive participation. Research conducted by Zwick et al. (2017) finds evidence that companies experiencing financial difficulties tend to participate in financial incentive programs to save on cash flow expenditures. On the other hand, this study finds that financial difficulties do not motivate taking advantage of tax incentives during the pandemic.

The difference in the results of these studies is caused by the use of different proxies in determining financial difficulties. Research by Edwards et al. (2016) uses the debt ratio as a proxy for the variable of financial distress, which is calculated by dividing total debt by total assets. Meanwhile, in this study, financial distress uses a proxy for potential bankruptcy with the Altman Z-Score ratio. The Altman Z-Score ratio combines four ratios to determine the financial difficulties experienced by the company. The ratio consists of liquidity, profitability, solvency, and activity. The solvency ratio is calculated based on the market value of equity so that it is influenced by external factors such as fluctuating stock prices. In this study, several companies experienced a significant increase in stock prices, so the solvency ratio increased even though other ratios, such as liquidity and profitability, decreased. It is suspected to be the cause of the test results not following the expected hypothesis.

In addition, descriptive data analysis shows that companies that participate in tax incentives have an average Altman Z-Score ratio of 3.48, indicating that the company is classified as a healthy company and relatively safe from financial difficulties. Meanwhile, companies that do not participate in tax incentives also have an average Altman Z-Score ratio, indicating that the company is not in a state of financial difficulty. However, if viewed by sector, there are four sectors of companies participating in the tax incentive program which are indicated to be experiencing financial difficulties.

Tax Burden as a Driving Factor for The Use of Tax Incentives During The Pandemic

This study shows that the tax burden variable partially has a significant positive effect on the company's tendency to participate in the tax incentive program. Richardson et al. (2015) stated that companies in crisis would be more motivated to carry out strategies to reduce the tax burden in order to maintain the company's cash flow. Darussalam (2020) argues that the correct type of incentive given during the Covid-19 pandemic is the type of incentive that impacts the company's cash flow. Reducing or delaying tax payments can minimize cash outflows so that cash flow savings can be used for company operations or other investment activities. Companies also consider compliance costs, information costs, and image in deciding to participate in tax incentives (James, 2013). Tax incentives for taxpayers affected by the Covid-19 pandemic offered by the government can be a choice for companies to reduce cash outflows for tax payments by minimizing reputational risk.

While Zwick et al. (2017) find evidence that companies tend to react only to tax incentives that provide benefits such as generating additional cash flows in the current year. The company considers the costs and benefits of joining the tax incentive program.

Size and Profitability as Control Variables in The Use of Tax Incentives During The Pandemic

In this study, two control variables are used: firm size, calculated by the natural logarithm of total assets, and profitability, calculated using the Return on Assets (ROA) ratio. Based on the results of the regression analysis, it is stated that the firm size variable does not affect the company's tendency to participate in the tax incentive program. The regression results show a negative coefficient, which means that the larger the company's size, the less likely it is to participate in the tax incentive program. Pratama (2018)'s research and Kuncoro et al. (2020) also found evidence that firm size negatively affects the decision to participate in tax amnesty. Companies with larger sizes tend to be careful in carrying out strategies to reduce the tax burden (Wu et al., 2012) according to the theory of political costs where large companies are more supervised by the government and the public.

The following control variable is the profitability variable. Based on the results of the regression analysis, it is stated that the profitability variable has a significant positive effect on the company's tendency to participate in the tax incentive program, with a trend ratio of 1.4264. An increase in ROA of 1 unit will increase the company's tendency of 1.4264 times to participate in tax incentive programs. The results of this study follow Kuncoro et al. (2020), who state that profitability has a significant positive effect on the tendency of companies to participate in tax amnesty.

Application of The Difference-in-Difference (Did) Method

This study uses the difference-in-difference (DiD) method by adding additional variables, namely POST, TREAT, and POSTTREAT. The regression analysis results on the POST variable have no significant effect, indicating no significant change in company participation in the tax incentive program for all companies after the enactment of tax incentive regulations for taxpayers affected by the Covid-19 pandemic. The POST variable has no significant effect because the company's participation in the tax incentive program is relatively unchanged in the third quarter. The following variable is TREAT which shows no significant effect on the tendency to participate in the tax incentive program. So it can be concluded that the impact of the Covid-19 pandemic does not affect the company's preference to participate in the tax incentive program. Companies affected by the Covid-19 pandemic do not immediately decide to participate in the tax incentive program.

Next is the POSTTREAT variable, which describes the interaction between the time variable and the group variable so that it becomes an estimator of the difference between the treatment group and the control group before and after applying the tax incentive rules. The regression analysis results on the POSTTREAT variable also show an insignificant effect, which means that the participation of companies affected by the Covid-19 pandemic before and after the tax incentive rules did not experience significant changes.

Companies affected by the Covid-19 pandemic (treatment group) did not experience changes in the period before and after the tax incentive rules compared to companies that were not affected by the Covid-19 pandemic (control group). The

criteria for being affected by the Covid-19 pandemic in this study refer to the Information or Material Facts Report of the Impact of the Covid-19 Pandemic published by companies listed on the Indonesia Stock Exchange. Criteria for being affected by the Covid-19 pandemic include cessation or limitation of operational activities, decreased income, decreased profit or loss, fulfillment of short-term obligations, and termination of employment.

CONCLUSION

Based on the results of empirical data testing, this study finds that financial difficulties do not affect the tendency of companies to participate in tax incentive programs. The financial difficulties experienced by the company do not determine the preference to participate in the tax incentive program. The reason for rejecting this hypothesis is that the research sample companies have an average Altman Z-Score ratio that does not experience financial difficulties. Another finding is that the tax burden motivates companies to participate in the National Economic Recovery Program - tax incentive program. This finding implies that companies with a high tax burden will carry out a strategy to reduce the tax burden. Tax incentives are one of the instruments to reduce cash outflows considering that tax installment payments are a significant expense item.

This finding implies that the Government of Indonesia will continue the tax incentive policy for companies affected by Covid-19, emphasizing policies oriented toward reducing tax debt and increasing operational expense posts that taxes can finance. Both posts have an impact on saving cash out in times of crisis.

This study has limitations in using a proxy for financial distress variables with the Altman Z-Score bankruptcy prediction. The components in the Altman Z-Score consist of 4 (four) ratios, not only emphasizing increasing liquidity or decreasing operating profit. In addition, companies that disclose the use of tax incentives in their financial statements are companies that have a relatively safe Altman Z-Score. Therefore, we recommend further research to try liquidity proxies or debt-to-equity ratios as the proxies used in previous studies.

REFERENCES

- Ahmar, N., Pujiati, D., & Usman, M. N. (2018). Tax Incentive-Based Economic Policy Model. *Simposium Nasional Keuangan Negara*, 41–57. <https://jurnal.bppk.kemenkeu.go.id/snkn/article/download/212/111/>
- Assidi, S., Aliani, K., & Omri, M. A. (2016). Tax Optimization and The Firm's Value: Evidence from The Tunisian Context. *Borsa Istanbul Review*, 16(3), 177–184. <https://doi.org/10.1016/j.bir.2016.04.002>
- Bank Indonesia. (2020). *Economic Performance during the Covid-19 Pandemic*. https://www.bi.go.id/id/publikasi/laporan/Documents/4_LPI2020_BAB2.pdf
- Darussalam. (2020). *The Role of Taxes as a Rescuer for The Impact of Covid-19*. DDTC News. <https://news.ddtc.co.id/peran-pajak-as-selamat-dampak-Covid-19-24258>
- Edwards, A., Schwab, C., & Shevlin, T. (2016). Financial Constraints and Cash Tax

- Savings. *The Accounting Review*, 91(3), 859–881. <https://doi.org/10.2308/accr-51282>
- Fernandes, A. A. T., Figueiredo Filho, D. B., Rocha, E. C. da, & Nascimento, W. da S. (2020). Read This Paper If You Want to Learn Logistic Regression. *Revista de Sociologia e Política*, 28(74). <https://doi.org/10.1590/1678-987320287406en>
- Fidiana. (2021). Tax Facilities Through Omnibus Law Taxation: A Canon Taxation Review. *Policy & Governance Review*, 5(3), 195–205. <https://doi.org/https://doi.org/10.30589/pgr.v5i3.373>
- Fredriksson, A., & Oliveira, G. M. de. (2019). Impact Evaluation Using Difference in Differences. *RAUSP Management Journal*, 54(4), 519–532. <https://doi.org/10.1108/RAUSP-05-2019-0112>
- Gopinath, G. (2020). *The Great Lockdown: Worst Economic Downturn Since the Great Depression*. IMFBlog. <https://blogs.imf.org/2020/04/14/the-great-lockdown-worst-economic-downturn-since-the-great-depression/>
- Gujarati, D. N. (2022). *Basic Econometrics*. New York: McGraw-Hill.
- Hosmer, D. W., Lemeshow, S., & Sturdivant, R. X. (2013). *Applied Logistic Regression* (3rd ed.). New York: John Wiley & Sons, Inc. <https://doi.org/10.1002/9781118548387>
- Indonesiabaik.id. (2021). *Implementation of Social Distancing in Several Regions of Indonesia*. Indonesiabaik.Id. <https://indonesiabaik.id/infografis/penerapan-psbb-di-sejumlah-wilayah-indonesia>
- James, S. (2013). Tax and Non-Tax Incentives and Investments: Evidence and Policy Implications. *Investment Climate Advisory Services of The World Bank Group, September*. <https://doi.org/10.2139/ssrn.2401905>
- Kartiko, N. D. (2020). Tax Incentives in Responding to The Impact of The Covid-19 Pandemic on The Tourism Sector. *Jurnal Pajak Dan Keuangan Negara (PKN)*, 2(1), 124–137. <https://doi.org/10.31092/jpkn.v2i1.1008>
- Kuncoro, A., Purwanti, D., & Andriani, A. F. (2020). The Influence of Tax Audit , Tax Avoidance and Company Risk on Company Involvement in Tax. *RISSET : Jurnal Aplikasi Ekonomi Akuntansi Dan Bisnis*, 2(1), 181–203. <https://doi.org/https://doi.org/10.35212/riset.v2i1.47>
- Kurniati, D. (2021). *2020 MSME Incentives Lack of Interest, This is The Government's Step This Year*. DDTC News. <https://news.ddtc.co.id/insentif-umkm-2020-minim-peminat-ini-step-government-tahun-ini-27563>
- Okafor, L. E., Bhattacharya, M., & Apergis, N. (2019). Bank Credit, Public Financial Incentives, Tax Financial Incentives and Export Performance During The Global Financial Crisis. *The World Economy*, 43(1), 114–145. <https://doi.org/10.1111/twec.12848>
- Pratama, A. (2018). Determinants of Indonesian Public Listed Companies to Participate in The Tax Amnesty. *Indonesian Journal of Sustainability Accounting and Management*, 2(2), 136. <https://doi.org/10.28992/ijSAM.v2i2.57>
- Putra, A., & Solikin, A. (2018). Unattractive Incentive: The Case of Tax Allowance Policy in Indonesia'S Shipyard Industry. *Jurnal BPPK : Badan Pendidikan Dan Pelatihan Keuangan*, 11(2), 101–113.

<https://doi.org/10.48108/jurnalbppk.v11i2.351>

- Richardson, G., Taylor, G., & Lanis, R. (2015). The Impact of Financial Distress on Corporate Tax Avoidance Spanning The Global Financial Crisis: Evidence From Australia. *Economic Modelling*, 44, 44–53. <https://doi.org/10.1016/j.econmod.2014.09.015>
- Rodgers, D., & Hambur, J. (2018). *The GFC Investment Tax Break*. <http://www.rba.gov.au>
- Sidik, S. (2020). *50 More Issuers Only Strong Until June, This Is A Suffering Sector*. CNBC Indonesia. <https://www.cnbcindonesia.com/market/20200513100913-17-158086/50-lebih-emiten-cuma-kuat-sampai-juni-ini-sektor-tersengsara>
- Stamatopoulos, I., Hadjidema, S., & Eleftheriou, K. (2016). Explaining Corporate Effective Tax Rates Before and During The Financial Crisis: Evidence from Greece. *Schweizer Archiv Für Neurologie Und Psychiatrie (Zurich, Switzerland : 1985)*, 138(1), 31–44. <https://mpra.ub.uni-muenchen.de/73787/>
- Wu, L., Wang, Y., Luo, W., & Gillis, P. (2012). State Ownership, Tax Status and Size Effect of Effective Tax Rate in China. *Accounting and Business Research*, 42(2), 97–114. <https://doi.org/10.1080/00014788.2012.628208>
- Yunianto, T. K. (2020). *Production Drops During the Pandemic, Half of Textile Factories Threatened To Close*. Katadata.Co.Id. <https://katadata.co.id/ekarina/berita/5ed9bc61b6790/produksi-anjlok-saat-pandemi-separuh-pabrik-tekstil-terancam-tutup>
- Zelekha, Y., & Sharabi, E. (2012). Corruption, Institutions and Trade. *Economics of Governance*, 13(2), 169–192. <https://doi.org/10.1007/s10101-012-0109-7>
- Zwick, E., Mahon, J., Chamberlain, G., Contos, G., Dew-Becker, I., Foley, F., Goldsmith-Pinkham, P., Greenwood, R., Hanson, S., Hodge, R., Kitchen, J., Langetieg, P., Manoli, D., Sorkin, I., Summers, L., Sunderam, A., Turner, N., Winberry, T., Yagan, D., & Yogo, M. (2017). Tax Policy and Heterogeneous Investment Behavior. *The American Economic Review*, 107(1), 217–248. <https://doi.org/10.1257/aer.20140855>