

## Financial Determinants of Corporate Tax Planning among Malaysian Listed Companies in Trading and Services

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**Abstract:** Corporate Tax Planning was identified as one of the activity routes to creative accounting strategies in the prior literature review as well as a mechanism used by the companies to reduce tax liabilities. The purpose of this study is to investigate the relationship between capital intensity, leverage, audit quality, and financial distress as the financial determinants of corporate tax planning, proxied by effective tax rates. The study used the financial data retrieved from Thomson Data stream which consists of 43 Malaysian Listed Companies in trading and services for six years period from 2016 to 2021. The final sample of 258 firm-year observations was analyzed using fixed effect model regression. This study reveals that capital intensity, leverage, and audit quality have a significant relationship with the effective tax rate. Thus, it can be concluded that financial variables and external monitoring are able to influence the level of corporate tax planning.

**Keywords:** corporate tax planning, corporate tax, effective tax rate, public listed companies.

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## INTRODUCTION

Taxes are the major source of state revenue for the implementation of national development, as well as the key driver of economic activity in powering governmental operations and providing for public amenities; therefore, taxes can boost societal wealth and welfare (Maula et al., 2019). Tax system is also used as a method to increase state income, promote economic expansion, stabilize the economy, and redistribute wealth (Hazir, 2019). It is not only a fundamental mechanism for the fiscal system as it also influences corporate decisions, such as those on accounting, financing, and investments. Furthermore, tax-related matters are critical to consider because of their impact not just on the government and taxpayers, but also on third parties such as investors and other financial reporting users (Edgley & Holland, 2021).



Whether a company is listed or not, all Malaysian corporations must pay taxes. Furthermore, in 2001, the Malaysian Tax Regulation modified the Official Assessment System (OAS) for corporations to the Self-Assessment System (SAS) (Saad et al., 2014). The main difference between the OAS and the SAS is that, in OAS, taxpayers are required by law to declare all necessary particulars pertaining to their income and expenses for that particular year assessment and they need to submit the necessary returns along with all required supporting documents to the tax administrator. The tax administrator is then responsible for reviewing all tax returns and issuing a notice of tax liability. However, for SAS, it transfers the tax authority's functions, particularly those linked to analyzing business tax returns and determining corporate tax liabilities, to the corporate taxpayer. One of the key motivations for transitioning from OAS to SAS is to educate corporate taxpayers and enhance their awareness of their tax responsibilities. Having this SAS will provide a variety of opportunities for corporate taxpayers to manipulate their corporate tax return in front of tax regulators. This situation differs with the government's goal, which is to encourage corporate taxpayers to pay taxes and obtain a better understanding of tax regulations by having the SAS. These issues have been highlighted for educational purposes because if corporate tax planning activities become aggressive, there would be a sustainability problem. Since corporate taxes are calculated using financial statements, corporate taxpayers will perform corporate tax planning by utilizing tax incentives and creative accounting strategies to minimize company's tax burden. Therefore, the purpose of this study is to investigate which financial determinants influence the level of company tax planning.

Corporate Tax Planning can be defined as a company's efforts to lower its corporate tax burden in its business transactions with tax authorities (Ftouhi & Ghardallou, 2020; Cooper & Nguyen, 2020). A range of tax applications described in the tax laws may be included in corporate tax planning, such as the federal government's tax incentive scheme for capital market companies (Dai et al., 2020; Sun et al., 2020). Every company in Malaysia has used corporate tax planning to establish their capability to develop business strategies. Corporate tax planning of company strategy is good in some aspects, but it will be problematic or become worse if corporate tax planning activities are not controlled. Companies will engage in aggressive corporate tax planning actions as a result of not controlling the activities. Besides, there are a few factors influencing corporate tax planning level and the factors are capital intensity, leverage, audit quality, and financial distress. The corporate tax planning level is actually equal to the Effective Tax Rate (ETR) or Actual Tax Paid (ATP) (Ado et al., 2021). In this study, corporate tax planning level is utilized as a stand-in for tax planning. The corporate tax planning level, which compares the amount of taxes paid by a business to its gross profit, is a fundamental summary measure of tax performance. As it indicates the tax rate paid on the company's income, the corporate tax planning level generally serves as a gauge of the tax burden on the business. The corporate tax planning threshold has long been a discussion point among policymakers and interest groups, particularly when discussing corporation tax issues in tax reform discussions.

Capital intensity refers to a company's investment activity that is tied to fixed asset investments. The company's non-current assets will be compared to its overall assets (Sonia & Suparmun, 2019). Due to depreciation, non-current assets that make up a large portion of total assets could lower the company's tax obligation. When determining a company's corporation tax burden, non-current asset depreciation directly reduces its profit, and it will lower the tax burden. According to corporate tax regulations, this depreciation is a deductible expense. As a result, high capital intensity might be a sign of corporate tax evasion (Nugrahadhi & Rinaldi, 2021). In the previous study, there is a significant positive relationship between capital intensity and aggressive corporate tax planning (Sugeng et al., 2020). Aggressive corporate tax planning signifies that the company has the lower ETR.

Leverage is a ratio that calculates how much debt a corporation uses to finance itself. As a result of the debt, interest will be charged. The interest expense incurred as a result of the debt will be subtracted from the company's net profit and utilized to reduce corporate tax later. If the firm relies on debt rather than equity for operational activity, interest expense is deductible, but dividends are not. Companies that rely heavily on leverage will have a low ETR. There is a positive relationship between leverage and corporate tax evasion (Suciarti et al., 2020). Tax evasion means the company has a lower ETR or a lower level of corporate tax planning.

Audit quality exists when the auditor conducts an audit of the company's financial statements, finds the violation in the client's accounting system, and then reports it in the audit report (Khamisan & Christina, 2020). Audit quality refers to the acceptability of audits performed by auditors in accordance with defined audit standards (Apandi, 2019). Audit quality is defined as the ability to improve the quality of a company's financial reporting, with high audit quality is predicted to increase investor confidence and cause the market to react favorably if the financial statements are audited by qualified auditors (Khamisan & Christina, 2020). Furthermore, the audit quality can be seen in the audit fees paid in the company's financial statements. The greater the expenditure on audit fees, the higher the level of corporate tax planning. Lestari & Nedya's (2019) study proves that audit quality has a negative relationship with Tax Avoidance. Tax avoidance means the company has a lower ETR or lower level of corporate tax planning.

Financial distress is seen as a form of measurement for the corporate failure, which can be determined by the financial ratios. The financial state of a company will give better understanding of the company's capacity to continue operating, and the ability to predict the company's failure. Financial distress might hinder a company's growth, where the companies must remain solvent under these conditions. Hence, companies may conduct corporate tax planning to avoid paying tax. By paying a huge amount of tax, the cash flow of the companies will be affected, which in turn reduces the earnings to be distributed to the shareholders. In this condition, the shareholders will evaluate the financial stability of the companies, and this may influence their investment decisions. Previous research has demonstrated a negative relationship between financial distress and corporate tax planning. A study by Dang & Tran (2021) shows that financial distress has an impact on the level of effective tax rate.

## METHODS

This study examines factors influencing the level of corporate tax planning among trading and services industries listed in Bursa Malaysia. Financial data were retrieved from Thomson Datastream from 2016 to 2021 to achieve the research objective. The final sample excludes companies with incomplete financial information, and this is to ensure a highly balanced data and account for inaccurate inference due to missing data. Next, companies that are delisted from Bursa Malaysia during the period investigation are also excluded. In addition, companies that change the accounting period during the year 2016 to 2021 were not included in the sample of study since there was no financial data on the year that less than 12 months accounting period.

Table 1 represents the sample selection procedures, showing the final sample of 43 firms after excluding negative pre-tax income, insufficient data, delisting companies, and company that change its accounting period between 2016 to 2021. The balanced panel data analysis was based on 258 firm-year observations.

In line with previous research in the field of taxation, this study examines the viability of corporate tax planning by utilizing ETR. The corporate tax planning was set as dependent variable and proxied by ETR, which is computed using the corporate tax paid divided by the pre-tax income. Therefore, negative pre-tax income

is excluded from this study since companies that incur loss will not have any significant value on the corporate tax planning.

**Table 1 Sample selection procedures (2016 to 2021)**

	Number of companies
Trading and services companies listed in Bursa Malaysia	191
Less: Companies with negative pre-tax income	114
Less: Companies with insufficient data	31
Less: Delisting companies from Bursa Malaysia	2
Less: Company that change its accounting period	1
Final sample	43

In achieving the research objectives, this study uses capital intensity, financial distress, leverage, and audit quality as independent variables. The capital intensity is computed based on the proportion of fixed assets on the total asset to determine how well the companies use their fixed assets in producing the income. Next, in measuring the leverage, the long-term debt is divided by the total asset to assess the level of debt utilized by the companies in purchasing their assets. For the audit quality, the common measure used by the previous is the audit fees, since it will determine the level of work and effort exerted by the auditors. For financial distress, this study uses the measurement developed by Altman (1968). Five key ratios consist of liquidity, profitability, leverage, solvency, and activity used in the Altman model's Z-score calculation as follows:

$$Z\text{-Score} = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5$$

Where:

$X_1$  = working capital / total assets

$X_2$  = retained earnings / total assets

$X_3$  = earnings before interest and tax / total assets

$X_4$  = market capitalization / total liabilities

$X_5$  = sales / total assets

The panel data multivariate model, which incorporates the benefits of both the cross-sectional and the time series models, E-Views, is used as the statistical tool in this study to analyze data that consists of a number of companies over a period of time. To examine the associations between the factors that affect ETR, the following model is employed:

$$ETR_{it} = \beta + \beta_1 CI_{it} + \beta_2 LE_{it} + \beta_3 AQ_{it} - \beta_4 FD_{it} + \epsilon$$

Where:

$i$  = company,  $t$  = company's financial years between 2016-2021,

$CI$  = Capital Intensity,

$LE$  = Leverage,

$AQ$  = Audit Quality,

$FD$  = Financial Distress,

$\beta$  is the coefficient of regression,

$\epsilon$  is the error term.

## RESULTS AND DISCUSSION

An overview of the data set is provided in this section to describe the main features of the financial information. Table 2 presents the descriptive statistics, which consist of mean, maximum and minimum values of the final sample. Based on the result, the mean for ETR, which is the proxy for corporate tax planning is 30.69%, the minimum value of ETR is 26.85%, while the maximum value is 100%. This indicates that some companies paid a much lower tax than others. The result also shows the details of the mean, maximum, minimum, and standard deviation of Capital Intensity (CI), Leverage (LE), Audit Quality (AQ), and Financial Distress (FD).

**Table 2 Descriptive statistics of measurement variables**

	ETR	CI	FD	LE	AQ
Mean	30.69189	0.309817	12.33127	0.176845	2446.407
Median	26.84874	0.290230	2.243171	0.142421	644.0000
Maximum	100.0000	0.850373	772.5382	0.524309	33300.00
Minimum	0.000000	0.012291	0.184115	0.000000	146.0000
Std. Dev.	18.65594	0.206133	57.14723	0.159042	4499.405

Accordingly, in accordance with the predetermined purpose of the study, the following regression analysis demonstrates the significance and direction of the relationship between the financial variables and corporate tax planning. The Hausman test is used to compare the effectiveness of different models. Based on the result of Hausman test as shown in Table 3, the null hypothesis is rejected with the probability value of 0.00 that less than 5% significance level. Thus, fixed effects model regression is more appropriate than random effects regression. As a consequence, the findings of the fixed effects model formed the basis for the discussion of the study.

**Table 3 Hausman Test**

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	85.280616	5	0.0000**

The regression results depicted in Table 4 reveal that capital intensity, leverage, and audit quality have a significant relationship with corporate tax planning with the p-value less than significance level of 5%. However, the financial distress did not have any significant relationship with corporate tax planning. The overall adjusted R-squared represents the model's explanatory power at 0.990229. The result indicates that 99% of the dependent variable (ETR level) can be explained by the independent variables (capital intensity, leverage, audit quality and financial distress), which means only 1% is explained by the other factors that are not included in the regression model. Next, the probability of the F-statistic of 462.4336 with the p-value of 0.0000 shows that the regression result is statistically significant since it is less than 5% significance level.

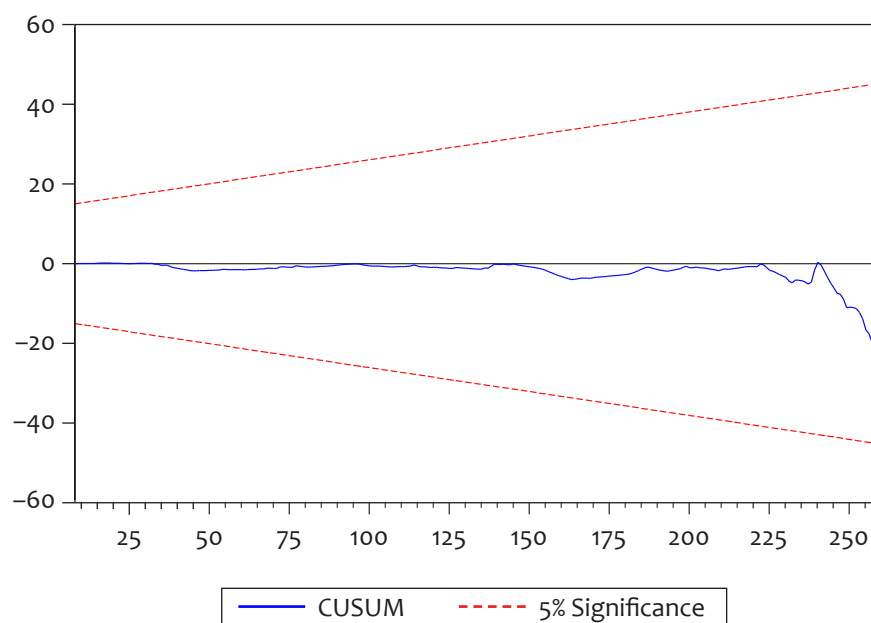
The result shows that the capital intensity (CI) has a significant positive relationship with ETR, which rejects the H1. This indicates the capital intensity is able to positively influence the level of ETR. In other words, the higher the capital intensity, the higher the tax paid by the companies. Therefore, it can be concluded that companies with a large portion of fixed assets are not using the tax incentives effectively in reducing their

ETR level (Panda & Nanda, 2020). The result of this study is similar to Kassim & Saad's (2019). Next, leverage (LE) has a significant negative relationship with ETR, which accepts the H2. This indicates that companies with higher leverage will tend to have a lesser ETR and pay less tax. Therefore, companies that has a higher long-term debt as compared to total asset tend to conduct effective tax planning using the interest paid to reduce their earning, thus leading to lower taxable profit. The result is consistent with the studies conducted by Hazir (2019) and Bubanić & Šimović (2021).

In terms of audit quality, the result reveals there is a significant positive relationship with ETR. Thus, H3 is accepted. It is evident that the high quality of external auditors will result a high level of ETR. This can be concluded that the external mechanism of audit quality is able to combat the aggressive corporate tax planning activities. This is in line with Marzuki & Al-Amin's (2021). Among all variables, financial distress does not have any significant relationship with ETR, and the result rejects H4. The result indicates that companies that financially facing financial difficulties will not influence their corporate tax planning activities. This is consistent with the study by Dhamara & Violita (2018) and Nurdiana (2021), where they found that financial distress does not have a significant impact on the level of ETR.

**Table 4 Fixed Effects Model Regression**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-10.35632	3.807245	-2.720160	0.0072
CI	60.25127	12.82631	4.697475	0.0000**
LE	-50.19642	18.12492	-2.769470	0.0063**
AQ	0.001070	0.000378	2.828032	0.0053**
FD	-0.054265	0.074441	-0.728959	0.4670
Adjusted R-squared	0.990229	Durbin-Watson stat		2.518812
F-statistic	462.4336	Prob(F-statistic)		0.000000



**Figure 1 CUSUM Test**



The cumulative sum (CUSUM) tests were used to determine the stability of the model parameters as depicted in Figure 1. The lines denote the limits of the 5% confidence interval. The figures demonstrate that the parameters are stable, with the sum of the squared residuals falling within the 5% significance limit. The CUSUM graph shows that the model is stable at a significant value of 0.05, and the financial data is significant for further analysis.

## CONCLUSION

This paper examines the relationship between financial variables and corporate tax planning by analyzing 258 firm-years of trading and services industry listed in Bursa Malaysia for six years period from 2016 to 2021. Based on the findings, it can be concluded that the accounting information in financial statements is able to influence the level of corporate tax planning. According to this study, capital intensity and leverage ratio provide evidence that these accounting numbers significantly affect the managers' decision towards corporate tax planning activities. Thus, companies must plan their tax effectively by applying tax incentives offered to them in reducing the tax burden. Furthermore, external monitoring by auditors is important in combating the aggressive tax planning activities and opportunistic behavior among the managers. For future research, this study recommends that the sample can be extended to other industries listed in Bursa Malaysia. Further analysis can be conducted by comparing the level of corporate tax planning between industries. Moreover, a detailed analysis on which financial variables are significantly influenced among each industry will provide a better insight for the policy makers on the tax incentives provided to different industries. In addition, other determinants such as firm size, research, and development activities can be added as independent variables.

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