# THE INFLUENCE OF DEBT-TO-EQUITY RATIO, CAPITAL INTENSITY RATIO, AND PROFITABILITY ON EFFECTIVE TAX RATE IN THE TOURISM SECTOR

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### Abstract

Masri and Martani (2012) explain agency problems that arise with the existence of influenceive tax rate due to differences in interests between the shareholder and management. Influence tax rate aims to apply tax regulations correctly to achieve the expected profit efficiency. This study examines the influence of debt level, capital intensity ratio (CIR), and company profitability on influenceive tax rates. Effective tax rate is measured in this paper, the debt level is measured using debt-to-equity ratio (DER), profitability is measured using return on assets (ROA) and the CIR shows property fixed assets in the company by compared total assets owned. The population in this study is the tourism sub-sector that has been audited and listed on the Indonesia Stock Exchange (IDX). This research period was conducted for 3 (three) years using a purposive sampling method. In this study, the data analysis techniques used were descriptive statistical analysis, classical assumption test, multiple linear regression analysis, F-test, t-test, and coefficient of determination test using the Statistical Product and Service Solutions (SPSS) program. The results of this study indicate that the level of debt, capital intensity ratio, and company profitability does not influence effective tax rate. This shows that if DER, ROA, and CIR have increased or decreased, the effective tax rate is not affected.

**Keywords:** Effective Tax Rate, Debt-to-Equity Ratio, Capital Intensity Ratio, Profitability

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VIRTUS

### **1. INTRODUCTION**

Tourism objects are non-oil and gas income that is widely enjoyed. The tourism sector is the strength and support of the human economy. Indonesia is a country that has diverse tourism potential because there are different cultural tribes so they can develop the tourism industry. The tourism sector has an essential role in the national economy, namely as a source of growth for the gross domestic product (GDP) and as one of the foreign exchange banks for the Indonesian state because tourism is the sector that absorbs the largest workforce. Investment in the tourism sector has the potential to accelerate growth and transform the economy. The Ministry of Tourism (2018) provides data related to the realization of the contribution of the tourism sector to the GDP in 2017, the data shows the tourism sector is 4.11% of the national GDP. According to data from the Central Bureau of Statistics (Badan Pusat Statistik – BPS), the number of foreign tourists arriving in Indonesia in November 2019 and the number of foreign tourists visiting in December 2019 increased by 7.52 percent. The number of foreign tourists visiting Indonesia in 2019 reached 16.11 million, an increase of 1.88 percent from the number of foreign tourists visiting 15.81 percent. Kompas data states that one of the tax targets which is the largest tax contributor is the tourism sector. So that what happens to the development of the tourism industry, will affect the national economy.

Lumbantoruan (1994) defines effective tax rate to fulfill tax provisions correctly but with the lowest possible amount of tax suppressed in order to obtain the expected profit and liquidity. Effective tax rate can be interpreted as a process carried out by taxpayers to fulfill their tax obligations optimally without violating applicable tax regulations. Tax evasion is the act of tax manipulation by a company to reduce unpaid tax amounts or avoid paying taxes to the government by using illegal financial engineering techniques to hide data and facts from tax authorities. One of the financial statements fraud is using the "income minimization (IM)" accounting technique, which is to report periodic earnings as low as possible to be able to pay the lowest possible tax. In fact, the reported profit is negative, so it does not pay taxes. If the value of engineered profits is still large, the board of directors will use accounting fraud (AF) techniques to drastically reduce profits. The engineering mode that is often used is to decrease the value of assets and equity, increase the value of the debt or create fictitious debt items, and increase costs and create fictitious expense items. In addition, the board of directors will also reduce the value of income as low as possible or hide several sales transactions so that the income reported in the financial statements is very small. As a result, state losses are estimated at thousands of trillions of rupiah. The amount of the loss is even estimated to be much greater than the loss due to tax evasion.

In general, companies that carry out effective tax rates legally and illegally will carry out tax planning. One way to look at tax planning can be seen from companies that have total inventory and fixed assets (capital intensity ratio — CIR). Comanor and Wilson (1967) state that the capital intensity ratio is one of the important pieces of information because it can show the level of efficiency in the use of invested capital. Rodríguez and Arias (2014) stated that companies can reduce the amount of tax paid annually by the depreciation costs contained in these fixed assets. This means that the greater the number of fixed assets of a company, the lower the amount of tax paid each year than companies having low fixed assets. The company's ability to generate profits during a certain period is described by profitability. Article 1 of Law Number 36 of 2008 states that income earned by tax subjects will be subject to income tax, so high corporate income will result in greater income taxes imposed on companies.

In Yunia's (2020) research, profitability has a significant influence on effective tax rate. The results of Gewar and Suryantini's (2020) research found that the level of debt is an analysis to find out how much the company is financed by debt. Debt will incur a fixed expense called "interest". Companies that use funds with fixed costs are said to produce favorable financial debt-toequity ratio or a positive influence if the income received from users of funds or elements of business costs is greater than the fixed burden on the users of the funds concerned debt-to-equity ratio will reduce the tax burden. Serli and Suhartono (2021) show that the level of debt has a significant influence on effective tax rate in a positive direction because the debt owned by the company is one of the drivers of whether companies are active or not in effective tax rate. Maulana (2020) found that capital intensity, profitability, and debt-to-equity ratio had no influence on effective tax rate. Tiaras and Wijaya (2015) found that the company's debt-to-equity ratio had no significant influence on effective tax rate. The results of Ariesta and Latifah's (2017) research have an influence on tax aggressiveness. Andeswari's (2018) research finds that profitability have aggressiveness. has a positive influence on tax avoidance, capital intensity has no influence on tax avoidance, and the debt-to-equity ratio has a positive influence on tax avoidance. According to a study by Andhari and Sukartha (2017), profitability and capital intensity have a positive impact on corporate tax aggressiveness, debt-capital ratios have a negative impact on corporate tax aggressiveness, and inventory intensity had no influence on tax aggressiveness. Suyanto and Suparmono (2012) found that the debt-to-equity ratio has a positive and significant influence on tax aggressiveness.

Rinaldi and Cheisviyanny's (2015) research results show that profitability has a significant positive influence on tax avoidance. Zahra (2017) finds that profitability shows a significant influence on tax avoidance, and capital intensity has not proven an influence on tax avoidance measures. Ardyansah and Zulaikha's (2014) research results show that debt-to-equity ratio, profitability, and capital intensity ratio have no significant influence on the effective tax rate. Ardyansah and Zulaikha (2014) state that the cost of depreciation is a cost that is deducted from income in calculating taxes, and the greater the cost of depression. Andhari and Sukartha (2017) found that the higher the company's profitability, the lower the effective tax rate, which means the higher the tax avoidance. Zahra (2017) states that profitability shows a significant influence on tax avoidance.



The debt-to-equity ratio can be an indication of a company taking tax action avoidance (Sinaga & Suardikha, 2019). The debt-to-equity ratio is the ratio used as a company's measuring tool in measuring the fulfillment of its long-term obligations. Ratio companies that are used to measure assets financed by debt are called "debt-to-equity ratios" (Pratiwi & Oktaviani, 2021). The results of the research by Antari and Setiawan (2020) state that the debt-toequity ratio has a positive influence which was also stated by Anggraeni and Oktaviani (2021) and in line with research by Prasetyo and Wulandari (2021). The results of research by Masrurroch et al. (2021) mention that the debt-to-equity ratio has no influence on tax avoidance which is in line with research from Triyanti et al. (2020) and Sinaga and Suardikha (2019). This result is contradictory to the research of Prasatya et al. (2020) which explains that the debt-to-equity ratio has an influence on tax avoidance. Masrurroch et al. (2021) state that capital intensity does not influence tax avoidance, in line with research by Hadi and Saputri (2018) and Zoebar and Miftah (2020). In contrast to research by Zainuddin and Anfas (2021) and Sinaga and Suardikha (2019), which stated that capital intensity had an influence negative on tax avoidance, which is in line with the results of the study by Apsari and Supadmi (2018). Meanwhile, the results of capital intensity have a positive influence on tax avoidance stated by Prasetyo and Wulandari (2021), which is in line with the results of Dwiyanti and Jati's (2019) study that capital intensity has a positive influence on tax avoidance.

When the company chooses debt and capital as an alternative to paying interest and other fixed costs that arise, the company will be active in using tax incentives that can save taxes so that the profit earned is high that it covers the debt it has. The contribution of this is expected to be information material for companies in helping to formulate accounting policies, especially in effective tax rate for the development of the company's business plans in the future and is expected to be able to provide helpful results for investors as a material consideration in investing their capital in the company and is expected to be used. investors to review the effective tax rate activities carried out by the company and whether it has been carried out properly and correctly so that investors can minimize losses that may occur.

The purpose of this study was to determine the magnitude of the impact of the debt-to-equity ratio, capital intensity ratio, and profitability on effective tax rate in tourism sub-sector companies listed on the Indonesian Stock Exchange (IDX). The research questions in this study are:

*RQ1: Does the debt-to-equity ratio have an influence on effective tax rate?* 

*RQ2:* Whether the capital intensity ratio have an influence on effective tax rate?

*RQ3: Does profitability have an influence on effective tax rate?* 

The contribution of this research is that it is hoped that this research can be a reference or information material for companies in helping to prepare accounting policies, especially in effective tax rate for the development of the company's business plans in the future and is expected to contribute results that are helpful for investors as material for consideration in investing in a company and is expected to be used by investors to review effective tax rate activities carried out by the company whether it has been carried out properly and correctly so that investors can minimize losses that can occur. This type of research used quantitative research with the results of the research in the form of statistical data and involves figures obtained from financial reports and annual reports available on the IDX.

The structure of this paper is as follows. Section 2 reviews the relevant literature. Section 3 analyses the methodology that has been used to conduct empirical research on the influence of the debt-to-equity ratio, capital intensity ratio, and profitability on effective tax rate in the tourism sector. Section 4 reviews the results and Section 5 presents the discussion. Section 6 presents the conclusion and suggestions.

### **2. LITERATURE REVIEW**

### 2.1. Agency theory

According to Jensen and Meckling (1976), agency theory is defined as an agency relationship as a contract in which one or more person (principal) hires another person (agent) to perform some services by delegating some decision-making authority to agents. The contract contains authority to agents. an agreement that states that shareholders want to reduce tax costs while managers want high profits such as obtaining maximum profits (Serli & Suhartono, 2021). The principle can limit deviations from its interests by establishing appropriate incentives for agents and by incurring monitoring fees designed to limit the activities of deviant agents. Agency theory can help in implementing various governance mechanisms to control the actions of agents in jointly-owned companies (Panda & Leepsa, 2017).

An agency problem (moral hazard) in agency theory has 2 (two) potential problems, namely risksharing and agent monitoring (Bendickson et al., 2016). The first problem is the risk-sharing agency problem between management and shareholders where a conflict arises from the existence of a contractual relationship between the principal and the agent. Then, the second problem is the agency problem that arises between the majority shareholder and the minority shareholder. This action can harm the owner of the stakeholder so that the value of the company being managed can decrease. The principle that is motivated to prosper itself with the company's profits (profitability) which is always increasing by utilizing the limited information (asymmetric information) owned by shareholders. These problems can be minimized by the existence of an effective tax rate by means of tax planning in the form of tax avoidance. Effective tax rate occurs because, on the one hand, the agent wants an increase in compensation through high profits while the owner or principle wants to reduce tax costs through low profits. So companies can manage tax by implementing effective tax rates in accordance with applicable laws, in order to provide agency solutions as tax collectors.

Agency theory states that financial statements are accounting numbers that are expected to solve problems between the agent and the principal (Nurjanah et al., 2017). The financial statements serve as a control tool that can reduce the risk of information asymmetry and conflicts of interest so as to reduce agency costs borne by the principal and agent. Thus, agency theory strongly supports the variables in this study. The appropriate variables include the company's profit variable (profitability) which is an effective monitoring mechanism in decision-making by the management. The capital intensity ratio as a measuring tool aims to gain profits by investing in fixed assets. Agency theory strongly supports the variables in this study. Profitability describes the fundamental performance of the company seen from the level of efficiency and the influence of the company's operations in obtaining profits. The company must have good management to be able to carry out its operational activities and must be in a profitable condition (profitable). Without profit, it will be very difficult for the company to attract capital from outside.

The second variable is the level of debt (debt-to-equity ratio) as a benchmark based on the company's cost of capital, the size of the capital is very important for the proportion of ownership. This ratio is also important for companies because this ratio can inform the source of funds used to finance the company's operations or business activities, from its own capital or debt. In addition, the company can also evaluate its ability to pay off its debts as they fall due. But mistakes can also occur if the use of debt is not managed properly by the agent or its management. Capital intensity ratio or capital intensity ratio as a measuring tool aims to gain profits by investing in fixed assets. Fixed assets that are managed well by the company can minimize the tax burden because companies that have fixed asset values compared to high asset values pay less tax than companies that have low fixed asset values, due to depreciation costs or depreciation on fixed assets. Handayani's (2018) agency theory states that there is an information asymmetry between managers who know more about internal information and shareholders because managers do not always act in accordance with the best wishes of shareholders, partly due to poor elections.

## 2.2. Debt-to-equity ratio, capital intensity ratio, profitability, and effective tax rate

Debt is an obligation owned by a company or debt is an obligation of a company originating from external sources, for example, bank loan debt in order to increase profits and profits, leasing debt, selling bonds, and the like. If the debt can be used or managed properly and optimally it will provide value for the company, but if it is not managed properly then the debt will pose a risk to the company. According to Gewar and Suryantini (2020), the level of debt is an analysis to find out how much the company is financed by debt (the debt burden borne by the company compared to its assets). In a broad sense, the debt-to-equity ratio is used to measure the company's ability to pay all its obligations, both short-term and long-term. For companies, the level of debt can have a significant impact, considering that the higher the use of debt in the company, the higher the risks faced and borne by the company. On the other hand, if the company has a lower debt level, it will have a smaller risk of loss, especially when the economy is sluggish. This impact also results in low returns when they are high.

Sari et al. (2021) used a ratio or percentage of the company's total debt-to-equity (DER), namely the debt-to-equity ratio or financial ratio that compares the amount of debt to equity in a period because using DER, serves as a material consideration for creditors for granting credit and investors in making stock investment decisions. Companies that use funds with fixed costs are said to produce favorable financial debt-to-equity ratios or positive influences if the income received from users of funds or elements of business costs is greater than the fixed burden on the users of the funds concerned, then the debt-to-equity ratio will reduce the tax burden, in accordance with the provisions of Article 6, paragraph (1), letter "a" of Law Number 36 of 2008. This cost reduction is very meaningful for companies that are subject to a very high tax burden. Therefore, the higher the interest rate, the greater the profit obtained by the company from the use of debt. The benefits of tax savings due to the high-interest expense have implications for increasing the company's debt.

Murwaningsari and Rachmawati (2017) note that the capital intensity ratio is also called "the total assets" or "capital turnover ratio". The capital intensity ratio shows the level of efficiency of all company assets in generating certain sales. The higher the capital intensity ratio, the more efficient the overall use of assets in generating sales. In the capital intensity ratio, management has the responsibility and the right to determine the investment policies undertaken by the company. The investment will be evaluated for performance by stakeholders (Nurjanah et al., 2017). Companies that have total inventory and fixed assets can be categorized as a capital intensity ratio where the company can reduce the amount of tax paid annually by the depreciation expense contained in fixed assets. The number of fixed assets of the company is increasing, the lower the amount of tax paid annually than companies that have a low amount of fixed assets (Sinaga & Sukartha, 2018). Capital intensity ratio (CIR) is a ratio analysis tool that is often used by companies to show how well the company is utilizing its assets. Companies invested in fixed assets are usually measured using the ratio of fixed assets divided by sales. The capital intensity ratio is the ratio between fixed assets, such as factory equipment, machinery, various properties, and sales. The capital intensity ratio is important information for investors because it can show the level of efficiency in the use of invested capital. The CIR can be calculated by adding up the longterm and short-term assets of the company and then dividing by the total revenue which is only sales.

Company profit (profitability) is a measuring tool to evaluate the efficiency of the use of capital in a company by comparing the capital used with the operating profit achieved (Afifah & Hasymi, 2020). In this study, profitability is proxied by using the return on assets (ROA) measure which can be interpreted as the company's ability to earn a profit from the assets used to measure the level of profitability of a company with the company's effectiveness in managing its assets. This ratio can be seen from the results of sales profits and investment income, the higher the profitability of a company, the higher the level of effectiveness of



a company's management performance (Lestari & Wulandari, 2019). An important measure of profitability is net income. Both creditors and investors will observe the company's profitability ratios before making a decision. The measurement of profitability ratios has several objectives, including a) evaluating the company's profit position in the previous year with this year; b) evaluating the development of income from time to time; c) performing the calculation of net profit after tax with own capital; d) measuring the productivity of all company funds used both loan capital and own capital. A profitability ratio is a ratio that measures the company's ability to generate profits at the level of sales, assets, and capital. Three ratios can be used in profitability ratios, namely, the ratio of net profit margin (NPM), return on assets (ROA), and return on equity (ROE). Net profit margin measures how much the company generates a net profit at a certain level of sales. A low net profit margin ratio may indicate management inefficiency. Return on assets is a ratio that can assess the company's ability to earn profits by utilizing existing assets.

Effective tax rate is an integral part of financial management. Effective tax rate is a financial process management that aims to optimize the tax burden, save taxes, maximize profits so as to increase the market value of the company (Shaidurova & Homokyová, 2020). Meanwhile, according to Destiny and Bahari (2021), effective tax rate is a process of planning, organizing, and controlling resources to pay taxes owed effectively and efficiently. Griffin and Lopez (2005) found that management is planning, organization, coordination, and control of resources so that goals are achieved effectively and efficiently so that goals are achieved in accordance with the plan by doing it carefully, organized, and on time. In general, effective tax rate is a way or method for a company to minimize the tax burden but still be within the applicable regulations. Tax savings strategies generally fall into four categories, namely:

1) *Creation.* Involves planning for the use of tax subsidies, such as moving operations within jurisdictions with lower tax rates.

2) *Conversion*. Requires a change of operations so that lower tax revenue or assets can be produced.

3) *Timing.* Involves appropriate techniques in transferring the amount that is taxed (the tax base) to a lower tax accounting period. For example, accelerated depreciation, which allows more than one asset's cost to be an expense, can reduce the current year's taxes thereby deferring tax payments.

4) *Splitting*. This technique divides the tax base based on two or more taxpayers to take advantage of the difference in tax rates.

# 2.3. Theoretical framework and hypothesis development

Sinaga and Sukartha (2018) have researched the effect of profitability, capital intensity ratio, size, and debt-to-equity ratio on the effect of manufacturing company tax rates. This research was conducted using a quantitative approach where the research sample took data on the Indonesia Stock Exchange regarding the effect of tax rates on manufacturing companies listed on the Indonesia Stock Exchange for the period 2012–2015 and used secondary data as a source of research data. The method used is the purposive sampling method. Based on the data in the table of research results, it shows that the independent variables used in this study, profitability, capital intensity ratio, size, and debt-to-equity ratio, have a positive effect on the related variable, namely effective tax rate. Aryanti and Gozali (2019) have researched the effect of company profits, debt levels, and fixed assets on the effect of manufacturing company tax rates in the basic industrial sector and chemical, metal, and similar sub-sectors on the IDX in the 2014-2017 period. This research uses a purposive sampling method in finding samples. The results obtained from this study are that fixed assets and company profits have a negative effect on tax rates that have an effect, while the level of debt has a negative effect on tax rates that have an effect.

Wijayanti and Muid (2020) conducted a study that aims to examine the factors that influence corporate effective tax rates by using effective tax rates as an indicator. The factors that influence effective tax rate are size, debt-to-equity ratio, profitability, inventory intensity, corporate governance, and capital intensity ratio. This study uses a quantitative type of research with the population in the study being manufacturing companies listed on the Indonesia Stock Exchange in 2016-2018. In taking the sample using purposive sampling method that is based on criteria. The analytical technique to test the hypothesis is to use multiple linear regression analysis. The results of this study indicate that the variables of size, debt-to-equity ratio, inventory intensity, corporate governance, and capital intensity ratio do not significantly affect effective tax rate. Serli and Suhartono (2021) conducted a study that aims to examine the influence of firm size, debt level, corporate profitability, and corporate governance on effective tax rate as proxied by the effective tax rate (effective tax rate). The research method uses quantitative methods and the population is taken as many as 192 manufacturing companies listed on the Indonesia Stock Exchange. The sampling technique used was purposive sampling, where in the study only 81 companies met the criteria. Sources of research data obtained from the official website of the Indonesia Stock Exchange. The results of this study illustrate that the firm size variable has a negative and significant influence on effective tax rate, profitability has a positive but not significant influence on effective tax rate, the level of debt (debt-to-equity ratio) has a positive but not significant influence on effective tax rate, the audit committee has a negative but not significant influence on effective tax rate and the independent commissioner has a positive and significant influence on effective tax rate. Noviatna et al. (2021) conducted research with quantitative methods and measuring tools in effective tax rate used proxied by effective tax rates. The population used in this study were manufacturing companies listed on the IDX in 2017–2019. While the research sample is 186 and applies purposive sampling to obtain research samples on manufacturing companies listed on the Indonesia Stock Exchange. The results of this study indicate that the variables of profitability, debt-to-equity ratio, and capital intensity ratio have an influence on effective tax rate. However, this



study does not support the hypothesis, namely the independent commissioner variable but this variable has an influence on effective tax rate.

# *2.3.1. The influence of debt level on effective tax rate*

Based on the theory and previous research by Wijaya and Febrianti (2017). the company's cost of debt can be a factor for tax deductions. Large debts make the company obtain tax incentives in the form of tax deductions on loan interest in accordance with the provisions of Article 6, paragraph (1), letter "a" of Law Number 36 of 2008. Managers can carry out and take advantage of interest costs. The debt ratio or debt-to-assets ratio is a ratio used to measure how much debt the company must bear, so this study states that the level of debt has a significant influence on effective tax rate and states that debt-to-equity ratio or debt levels have a positive influence on effective tax rate because of the company's debt. This will result in an interest expense that must be paid regardless of the company's profit. This condition makes interest costs act as a tax shield to minimize the tax burden. The greater the value of the debt-to-equity ratio, the greater the level of funding from third party debt. Research conducted by Sinaga and Sukartha (2018) concludes that the level of debt or debt-toequity ratio has a positive influence on effective tax rate. Then, the hypothesis can be concluded as follows:

*H1: The level of corporate debt has a significant influence on effective tax rate.* 

# *2.3.2. The influence of capital intensity ratio on effective tax rate*

Research conducted by Sinaga and Sukartha (2018) states that the capital intensity ratio can reduce tax paid the amount of annually with the depreciation costs contained in fixed assets. This means that the greater the number of fixed assets of a company, the lower the amount of tax paid each year compared to companies that have a low amount of fixed assets. The theory is in line with the results of Masrurroch et al.'s (2021) research, namely the CIR has a positive effect on the effect of tax rates. These results can be concluded that there is a significant positive effect between the CIR and partially the effect of tax rates. One of the reasons for the high tax burden of a company is the positive influence of a large number of fixed assets of the company. This is because some companies still recognize fixed assets that have reached the end of their economic life and there are fixed assets, namely company vehicles that are taken home with only 50% tax recognition. The calculation of the amount of tax that becomes the company's burden is influenced by the cost of depreciation on fixed assets. Wijayanti and Muid (2020) found that CIR has a negative influence on effective tax rate because the company's fixed assets are likely to be used as tax deductions from the depreciation of fixed assets every year. Therefore, companies that have a larger capital intensity ratio do not necessarily have a lower tax burden. The proportion of the company's fixed assets can be reduced by the tax burden payable from the resulting depreciation of fixed assets. The cost of depreciating assets is a deduction from pre-tax profits so it has an impact on the company's fixed assets and affects the company's effective tax rate. Then the hypothesis can be concluded as follows:

*H2: Capital intensity ratio (CIR) has a significant influence on effective tax rate.* 

# *2.3.3. The influence of profitability on effective tax rate*

Profitability can measure the effectiveness of management which is indicated by the size of the level of profits obtained in relation to sales and investment by using a measuring instrument, namely, ROA. Companies that have high profitability can pay higher taxes. Yunia's (2020) research explains that profitability has a significant influence on effective tax rate. Sadewo and Hartiyah's (2017) research concludes that profitability has a significant influence on effective tax rates on the grounds that high profitability in companies causes effective tax rates. With this condition, the management will carry out strategies in determining the efficiency of tax payments. Profitability is the company's ability to benefit from the performance process carried out by the company. The income level tends to experience profit with the taxes paid by the company, so companies that have a high level of profit will have a tax burden. So profit has a positive influence on effective tax rate. Afifah and Hasymi (2020) show that profitability has a significant influence on effective tax rate.

H3: Profitability has a significant influence on effective tax rate.

### **3. RESEARCH METHODOLOGY**

The method used in this research is the descriptive quantitative method. This research method is basically a scientific way to obtain data with certain goals and uses (Sugiyono, 2017, p. 38). Quantitative research is a scientific approach using numerical and statistical data derived from financial reports or annual reports that have been published on tourism sub-sector companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2019 period. The data in this study include secondary data, data taken by agencies or people not directly from the source, but from existing data or quoting from the literature. The source of the data used in this research comes from the website (IDX), namely www.idx.co.id. The tourism sub-sector companies publish audited financial reports and annual reports and these reports have complete data and are published successively in 3 (three) periods, 2017, 2018, and 2019. This study uses secondary data in the form of financial reports that have been audited and the annual report is listed on the IDX which is used as the object of research. The sample was selected using a purposive sampling method, which is a method of taking data samples based on certain criteria or conditions. Grouping data based on variables is a way of presenting data on each variable by performing calculations to answer the problem formulation (Sugiyono, 2017, p. 147).

The number of samples in this study amounted to 75. The sample was taken from the criteria that the authors chose. So that the sample criteria in this study are:



1) A tourism sub-sector company that is listed on the IDX and publishes financial reports and annual reports consistently for the period 2017–2019.

2) Companies that have completed and published audited financial data for the period 2017-2019 in a row.

3) Companies whose financial statements use rupiah (Indonesian currency).

4) A tourism sub-sector company domiciled in Greater Jakarta. This criterion is necessary because the tourism sub-sector is most in demand in the Greater Jakarta area. And the location of the head office of the tourism sub-sector company is in Jabodetabek.

This research was conducted over three years because the researchers chose financial statement data that did complete effective tax rate disclosures that were only available for three years in the tourism sector so that they could make comparisons related to debt-to-equity ratio, capital intensity ratio, and profitability to effective tax rate. This study refers to previous research, namely the research by Sinaga and Sukartha (2018), Aryanti and Gozali (2019), Wijayanti and Muid (2020), and Serli and Suhartono (2021).

The research will use Statistical Product and Service Solutions (SPSS) v25. software to process and analyze the data. The method used in processing the data of this research is the descriptive statistical test, classical assumption test, and hypothesis testing. Effective tax rate aims to control and fulfill tax obligations in accordance with tax laws correctly but the amount of tax paid can be reduced to obtain the expected profit. The measurement used is the effective tax rate (effective tax rate), which is the tax burden divided by the amount of profit before tax. The debt level variable was measured using the debtto-equity (DER) formula used to evaluate the financial position. Where the level of debt can be measured by dividing the total liability by the amount of equity. Profitability or company profit is a description of the company's overall financial performance by generating profits from managing return on assets (ROA) by dividing profit after tax by the company's total assets. The third variable, the fixed assets and total inventory of a company, is also called "the capital intensity ratio". It shows the property of fixed assets in the company as measured by comparing it with the total assets owned. The method of presenting data is one of the activities in making research reports so that they are easy to understand. The presentation of this research uses data related to numbers and analyzes the data on the variables that have been taken, then performs calculations using formulas. The data analysis techniques used in this study are as follows: 1) *Classical assumption test:* a) normality test; b) multicollinearity test; c) heteroscedasticity test; d) autocorrelation test. 2) *Descriptive statistical analysis*; 3) *Multiple linear regression analysis*; 4) *Hypothesis test*: a) T-statistic test; b) F-statistic test; c) coefficient of determination test (R<sup>2</sup>).

#### 4. RESULTS

The object used in this study is a tourism sub-sector company listed on the Indonesia Stock Exchange from 2017 to 2019. The sampling method used is the purposive sampling method, with predetermined sample determination criteria. The following is a table of calculations of the research sample after the selection and testing of the sample:

# **Table 1.** Sampling process of tourism sub-sectorcompanies listed on the Indonesia Stock Exchange(IDX) in 2017-2019

No.	Criteria		Total company	
1	The company remains the tour sector listed on the Indonesia S Exchange (IDX) for the period 2	41		
2	Tourism sub-sector companies not report consecutive financia statements on the Indonesia St Exchange (IDX) for the 2017-20	3		
3	The company remains in the to sub-sector that is not domicile the Jabodetabek area.	13		
Tota				
	Research period 3			
Tota	l of company samples	75		

Source: Data processed, 2021.

The table above shows that the population used is the tourism sub-sector companies listed on the IDX in 2017–2019, there are 41 companies. Then, the selection is carried out according to the criteria to get the research sample. The number of samples obtained according to the criteria is 25 samples for the 2017–2019 period. So the total sample studied was 75 companies.

Table 2. Descriptive statistics test

Variable	Ν	Minimum	Maximum	Mean		Std. deviation
variable	Statistic	Statistic	Statistic	Statistic	Std. error	Statistic
Debt-to-equity ratio	75	-39.93	4.07	0.2079	0.55007	4.76370
Capital intensity ratio	75	0.00	0.95	0.4339	0.03110	0.26935
Profitability	75	-0.25	0.26	0.0199	0.00746	0.06461
Effective tax rate	75	-0.81	2.64	-0.0541	0.04600	0.39840
Valid N (listwise)	75					

Source: Data processing results.

In the descriptive statistical test results, the debt level variable as measured by DER is the debt-to-equity ratio which is calculated by dividing the total debt and total capital showing a maximum value of 4.07 owned by the company PT Citra Putra Realty in 2018, the minimum company value also obtained from the table above is -39.93 this value is owned by PT Citra Putra reality in 2017. The mean value generated by the table above in this debt level variable is 0.2079, and the standard deviation value is 4.76370. The capital intensity ratio variable is measured using a ratio (CIR), which is measured by dividing the total fixed assets by the total assets owned by the company which aims to provide information for investors because it can show the level of efficiency of the use of invested capital. The following are the results of the capital intensity ratio research using descriptive statistics on



the company PT Intikeramik Alamasri Industri has a maximum value of 0.95 in 2017 and a minimum value is PT Paronama Sentrawisata is 0.00 in 2017. While the mean value generated by the table above in this variable is 0.4339, and the standard deviation value is 0.26935.

The results of the analysis using descriptive statistics on the profitability variable measured using the ROA ratio, which is calculated by dividing the profit after income tax and total assets, show the maximum value for this variable is 0.26 which is owned by PT Indonesia Paradise Property in 2019, the minimum value of the company is also obtained from the table above of -0.25 the value is owned by PT Intikeramik Alamasri Industri in 2017. The mean value generated by the table above in this profitability variable is 0.199 and has a standard deviation of 0.6461. The dependent variable used in this study is effective tax rate which is measured using the effective tax rate ratio or effective tax rate (*Y*). This variable is calculated by dividing the income tax burden by the profit before tax. The effective tax rate strategy is very beneficial for the company because it can make a company minimize the amount of tax payment obligations legally and permitted in laws and regulations. The results of the analysis measured using SPSS and using descriptive statistical test methods on the Y variable showed a maximum value of 2.64 which was owned by PT Sanurhasta Mitra in 2019, the minimum company value is -0.81 at PT Arthavest in 2019. The mean value generated by the table in this effective tax rate variable above is -0.0541, and the standard deviation value is 0.39840.

#### 4.1. Classical assumption test

#### 4.1.1. Normality test

The normality test was carried out to test a variable whether the regression model, confounding variable, or residual variable had a normal data distribution. A good regression model is to have a data distribution that is normal or close to normal. The Kolmogorov-Smirnov test is a statistical program. The Kolmogorov-Smirnov test is a normality test based on statistical test decision-making if the significant value is greater (> 0.05) then the data is normally distributed. Meanwhile, if the significant value is less than (< 0.05) then the data is not normally distributed.

Table 3. One-sample Kolmogorov-Smirnov test

	Unstandardized residual 16				
Normal	Mean	0.0000000			
parameters <sup>a,b</sup>	Std. deviation	1.32141513			
Most sytroms	Absolute	0.122			
Most extreme differences	Positive	0.122			
unterences	Negative	-0.103			
Test statistic	0.122				
Asymp. Sig. (2-tai	Asymp. Sig. (2-tailed)				

Note: a. Test distribution is normal; b. Calculated from data; c. Lilliefors significance correction; d. This is a lower bound of the true significance.

Source: Data processing results

The results of the normality test using a one-sample Kolmogorov-Smirnov test show that the Asymp. Sig. is at a value of 0.200 > 0.05 which means that this value is greater than the value of 0.05, then the data is declared normally distributed.

#### 4.1.2. Multicollinearity test

A multicollinearity test was conducted to test in regression model whether data found the a correlation between the independent variables consisting of the level of debt, capital intensity ratio, and profitability. A good regression model should not have a correlation between the independent variables. To detect multicollinearity problems in this study, the tolerance and VIF (variance inflation factor) values contained in the table of multicollinearity test results were used. The cut-off value that is generally used to indicate the presence of multicollinearity is tolerance 0.10 or equal to a VIF of 10.

Tabel 4. Multicollinearity test

	Coefficients <sup>a</sup>									
Model		Unstandardized Model coefficients		Standardized coefficients	t	Sig.	Collinearity statistics			
		В	Std. error	Beta		-	Tolerance	VIF		
	(Constant)	1.214	966.224		1.257	0.213				
1	Debt-to-equity ratio	0.002	0.010	0.018	0.157	0.875	0.960	1.042		
1	Capital intensity ratio	-0.347	0.182	-0.235	-1.907	0.061	0.868	1.153		
	Profitability	-1.262	0.752	-0.206	-1.678	0.098	0.877	1.140		

Note: a. Dependent variable: Effective tax rate. Source: Data processing results.

The results of the multicollinearity test stated that the results of the debt level variable or "the debt-to-equity ratio" showed a tolerance value of 0.960 while debt behavior had a VIF of 1.042. Meanwhile, the second variable in this study is the capital intensity ratio which has a tolerance value of 0.868 and a VIF value of 1.153. The last variable used in this study is profitability (ROA) which has a tolerance value and VIF of 0.877 and 1.140, respectively.

#### 4.1.3. Heteroscedasticity test

A heteroscedasticity test was carried out to find out whether there was an inequality of residual variance from one observer to another. If the variance is fixed then it is called homoscedasticity and vice versa if the variance is different it is called "heteroscedasticity". A good regression model is whether or not there is heteroscedasticity.







*Note: Dependent variable: Effective tax rate. Source: Data processing results.* 

The result of the heteroscedasticity test is that the points on the lines must be spread out. The picture above shows that the points drawn in a certain pattern do not collect or spread, they do not form a certain pattern in several points. And the point spreads through 0 and spreads through the number 2. So it can be stated that the model or heteroscedasticity test is declared to have passed and the data does not occur heteroscedasticity.

### 4.1.4. Autocorrelation test

The autocorrelation test aims to test whether in the linear regression model, there is a correlation between the confounding error in period *t* and the confounding error in the previous *t*-1 period. If there is a correlation then the data is declared problematic. Meanwhile, if there is no autocorrelation then the data is safe. To detect autocorrelation, statistical tests can be carried out through the Durbin-Watson test (DW test), this has a fundamental problem, namely, it is not known precisely about the distribution of the statistics itself or there is no conclusion, then the data must be retested with the run test and Cochrane-Orcutt test. To perform the autocorrelation test, it can be detected using the Durbin-Watson test. The Durbin-Watson test may use the following conditions:

1. Number  $(d < d_L) / (d > \overline{4} - d_U)$ , then there is a positive autocorrelation;

2. Number  $(d_U < d < 4 \cdot d_U)$ , then there is no autocorrelation;

3. Number  $(d_L < d < d_U) / (4 \cdot d_U < DW < 4 \cdot d_L)$ , then there is autocorrelation or no information, and further tests must be carried out.

Table 5. Autocorrelation Cochrane-Orcutt test

	Model summary <sup>b</sup>									
Model	Model R R-square Adjusted R-square Std. error of the estimate Durbin-Watson									
1	0.218ª	0.048	0.007	3881.83809	1.988					
Note: a. Pr	Note: a. Predictors: (Constant), LAG_X3, LAG_X1, LAG_X2; b. Dependent variable: LAG_Y.									

*Source: Data processing results.* 

The results of the autocorrelation test using the Cochrane–Orcutt showed that the Durbin–Watson value changed to 1.7092 < 1.988 < 2.291. So, it can be concluded that the autocorrelation test with the Cochrane–Orcutt test does not show autocorrelation according to the formula Du < Dw < 4-Du. It can be concluded that the data has passed the autocorrelation test. So, the correlation between the nuisance error in period t and the confounding error in the previous t-1 period does not have a problem.

#### 4.1.5. Multiple linear regression analysis

Multiple linear regression test is used to measure the value and is significant, the influence that appears in the correlation between the causal or dependent variables and the independent variables, namely the level of debt (DER), capital intensity ratio (CIR) and profitability (ROA) on the dependent variable, namely effective tax rate (effective tax rate). Hypothesis testing can be formulated with multiple linear regression models as follows:

$$EFFECTIVE TAX RATE = \alpha + \beta 1DER + \beta 2CIR + \beta 3ROA + e$$
(1)

where, Y = Effective tax rate;  $\alpha =$  Constant;  $\beta 1, 2, 3 =$  Regression coefficient for each variable *X1*, *X2*, and *X3*; X1 = Debt-to-equity ratio;
X2 = Capital intensity ratio;
X3 = Profitability;
e = Standart error.

Table 6. Multiple linear regression analysis test

	Coefficients <sup>a</sup>									
Model		Unstandardized Model coefficients		Standardized coefficients	t	Sig.	Collinearity statistics			
		В	Std. error	Beta		-	Tolerance	VIF		
	(Constant)	1.214	966.224		1.257	0.213				
1	Debt-to-equity ratio	0.002	0.010	0.018	0.157	0.875	0.960	1.042		
1	Capital intensity ratio	-0.347	0.182	-0.235	-1.907	0.061	0.868	1.153		
	Profitability	-1.262	0.752	-0.206	-1.678	0.098	0.877	1.140		
Note	a Denendent variable. Ff	fective tay rate								

*Note: a. Dependent variable: Effective tax rate.* 

Source: Data processing results.

Based on the results of the multiple linear regression test, the constant value is 1.214. Other results are also known to include the value of the debt level variable constant (DER) of 0.002, the value of the capital intensity ratio (CIR)  $\left( \text{CIR} \right)$ 



coefficient of -0.347, and the value of the last variable, profitability (ROA), of -1.262.

#### 4.1.6. Coefficient of determination test (R<sup>2</sup>)

Ghozali (2018) suggests that the coefficient of determination  $(R^2)$  is useful for knowing how far the model's ability is on the dependent variable.

The coefficient of determination test  $R^2$  produces a picture in the ratio of whether the variable is strong or not. In this study, researchers used independent variables, namely the debt-to-equity ratio, capital intensity ratio (CIR), and profitability to the dependent variable, namely effective tax rate (effective tax rate).

the dependent variable. The F-test is carried out by looking at the table F-values and calculated F-values,

as well as looking at the Sig. contained in the table.

This study uses independent variables, namely

the level of debt, capital intensity ratio, and

profitability with return on assets on the dependent

variable, namely effective tax rate (effective tax rate).

#### Table 7. Coefficient of determination test (Adjusted R-square)

Model summary <sup>b</sup>								
Model	R	R-square	Adjusted R-square	Std. error of the estimate	Durbin-Watson			
1	0.256ª	0.065	0.026	3931.09756	1.642			
Note: a. Pre	Note: a. Predictors: (Constant). Profitability. Debt-to-equity ratio. Capital intensity ratio: h. Dependent variable: Effective tax rate.							

Note: a. Predictors: (Constant), Profitability, Debt-to-equity ratio, Capital intensity ratio; b. Dependent variable: Effective tax rate. Source: Data processing results.

Based on the adjusted R-square value, the magnitude of the R-value is 0.026 or 2.6%, this means that the dependent variable that can be explained by the independent variable is only 2.6%. While the remaining 97.4% (100%–2.6%) is explained by other variables outside the model. This means that the application variable is not too strong.

### 4.1.7. Simultaneous hypothesis test (F-test)

The F-test was conducted to determine whether the independent variables as a whole simultaneously have a significant influence or not with

Table 8. Simultaneous hypothesis F-test

	ANOVA <sup>a</sup>								
	Model	Sum of squares	df	Mean square	F	Sig.			
	Regression	76820997.097	3	25606999.032	1.657	0.184 <sup>b</sup>			
1	Residual	1097200492.449	71	15453528.063					
	Total	1174021489.547	74						

Note: a. Dependent variable: Effective tax rate; b. Predictors: (Constant), Profitability, Debt level, Capital intensity ratio. Source: Data processing results.

Based on the F-test described in the table above, the calculated F-value with a significance level of 0.184 while F-table df = (n - k - 1) and at alpha 0.05 (5%) then F-table = 2.73. Then F-count > F-table and its significance level is 1.657 > 2.73, so it can be concluded that the regression coefficient of the independent variable is not significant to the dependent variable. While in the table above, the Sig. table has a value of 0.184 and F-count 1.657, 0.184 < 0.05, it can be explained that the independent variables, namely the level of debt, capital intensity ratio, and profitability together have a negative influence on the dependent variable of effective tax rate.

### 4.1.8. Partial test (T-test)

In this research, the t-test serves to find out how far the influence of the independent variables, namely the level of debt, capital intensity ratio, and profitability on the dependent variable, namely effective tax rate partially. The t-test was performed by looking at the significance values (Sig.) and by comparing the t-table values with the resulting t-count. The null hypothesis ( $H_0$ ) will be accepted if the significance value is more than 0.05 and vice versa if  $H_0$  is of a significance value of less than 0.05 then  $H_0$  will be rejected. Here is the formula to find the t-table:

$$t\_table = t (\alpha/2; n - k - 1)$$
<sup>(2)</sup>

$$t_{table} = t (0,05/2; 75 - 3 - 1) = t (0,25; 71) = 1,99394$$
(3)

	Coefficients <sup>a</sup>									
Model		Unstandardized coefficients		Standardized coefficients	t	Sig.	Collinearity statistics			
		В	Std. error	Beta		_	Tolerance	VIF		
	(Constant)	1.214	966.224		1.257	0.213				
1	Debt-to-equity ratio	0.002	0.010	0.018	0.157	0.875	0.960	1.042		
1	Capital intensity ratio	-0.347	0.182	-0.235	-1.907	0.061	0.868	1.153		
	Profitability	-1.262	0.752	-0.206	-1.678	0.098	0.877	1.140		

Table 9. Partial test (T-test)

*Note: a. Dependent variable: Effective tax rate. Source: Data processing results.* 

Based on the table of partial test results (T-test) the table above, it shows that of the three variables included in the regression model, it is known:

1. The level of debt (*XI*) has a value of Sig. of 0.875 > 0.05 so it can be concluded that the Sig. value of 0.875 is not smaller than 0.05 and the t-count value is 0.157 < t-table of 1.99394 so it can be concluded that *H1* is rejected, which means the level of debt has no significant influence on effective tax rate.

2. The capital intensity ratio (*X2*) has a Sig. value in the table of 0.061 > 0.05 and the t-count value of -1.907 < t-table of 1.99394, it can be concluded that *H2* is rejected, which means that the capital intensity ratio has no significant influence on effective tax rate.

3. Profitability (*X3*) has a Sig. value. in the table of 0.098 > 0.05 and the t-count value of -1.678 > t-table of 1.99394, it can be concluded that *H3* is rejected, which means that profitability has no significant influence on effective tax rate.

#### **5. DISCUSSION**

## 5.1. The influence of debt-to-equity ratio on effective tax rate

The result of the first hypothesis in this study is the level of debt (X1) has a positive effect on the effect of tax rates and has no significant effect on the effect of tax rates. Based on the results of the multiple linear regression coefficient test, it is 0.002 which means it has a positive effect, and based on the partial test or T-test, the Sig. value is 0.875 > 0.05. So, it can be concluded that the Sig. value of 0.875 is not less than 0.05 and the t-count value is 0.157 < t-table of 1.99394 so *H1* is rejected, which means the level of debt has a positive effect on the effect of tax rates and does not significantly affect the effect of tax rates. This shows that the level of debt of a company does not affect dependent variable, namely management the because companies that use debt to attract investors will generate income outside the company's business. This causes the company's profit to increase. This profit will later lead to an increase in the tax burden that must be borne by the company (Wijaya & Febrianti, 2017). The results of this study are not following agency theory. Agency theory explains that where debt should be used to provide funding that will generate interest expenses that can minimize taxes in a positive direction. The results of this study contradict the research of Serli and Suhartono (2021) that the level of debt has a positive and insignificant effect on the effect of tax rates. Because debt is one of the factors that can reduce the amount of profit from the company before taxes that arise due to interest costs.

# 5.2. The influence of capital intensity ratio on effective tax rate

The result of the second hypothesis is that the capital intensity ratio (*X2*) has a negative effect on tax rates and does not have a significant effect on tax rates. Based on the results of the multiple linear regression coefficient tests of -0.347 which means it has a negative effect and based on the partial test or T-test which has a Sig. value in the table of 0.061 < 0.05 and a t-count value of -1.907 > t-table

of 1.99394 can conclude that H2 is rejected, which means that the capital intensity ratio has a negative effect on the tax rate and does not have a significant effect on the tax rate. This shows that the higher the ratio of capital intensity owned by the company and its fixed assets, the lower the effective tax. This is due to the existing tax regulations related to investment in fixed assets. Fixed assets have a certain useful life which generally shrinks faster than the useful life predicted by the company. As a result, the faster useful life of fixed assets will make the company's effective tax rate lower. Because basically, companies that have high fixed assets tend to do tax planning, so they have a low effective tax. The results of this study are in line with previous research by Wijayanti and Muid (2020) and Putri and Lautania (2016). Ardvansah and Zulaikha (2014) state that the capital intensity ratio variable does not have a significant effect on effective tax because companies that have high levels of fixed assets also have to bear a high tax burden because fixed assets are company assets that are in the form and have a long economic period of significance and can generate profits for the company. This is because some companies have fixed assets whose economically useful lives have expired but are not derecognized and for other assets only 50%. Following the laws and regulations, Article 9, paragraph (8), letter "b" and letter "c" state that fixed assets include company assets that are subject to VAT. However, there are exceptions, namely the delivery of fixed assets whose taxes cannot be credited and special assets such as assets that according to their original purpose are not for sale. While companies in the tourism sector in this study refer to Minister of Finance Regulation (PMK) No. 86/PMK.03/2020 concerning Tax Incentives for Taxpayers Affected by Coronavirus Disease 2019 Pandemic. for all travel agency company transactions, both related to submissions without commission or others, and for every purchase of input VAT cannot be credited. So that these assets cannot reduce the tax burden. The results of this study are not following agency theory. Agency theory explains that the capital intensity ratio should be used to reduce the tax burden. Where companies that have total inventory and fixed assets can be categorized as capital intensity (Sinaga & Sukartha, 2018) which states that companies can minimize taxes paid annually by depreciating fixed assets. This means that the greater the number of fixed assets of a company, the lower the amount of tax paid annually compared to companies that have a small number of fixed assets. Companies with high levels of fixed assets have a lower tax burden than companies with low levels of fixed assets.

# 5.3. The influence of company profitability on effective tax rate

Based on the results of the multiple linear regression coefficient tests of -1.262 and based on the partial test or T-test which has a Sig. value in the table of 0.098 < 0.05 and a t-count value of -1.678 > t-table of 1.99394; it can be concluded that *H3* is rejected which means that profitability does not affect the effect of tax rates. This is because companies that have very large profitability have good financial performance so companies are more likely to plan



their taxes based on fiscal profit rather than accounting profit. So that the company is considered capable of managing its income and tax payments. Companies with high profitability can make tax payments following regulations. The results of this study are in line with research by Fitriana and Isthika (2021), Lanis and Richardson (2013), and Serli and Suhartono (2021) which state that companies that earn profits must prepare taxes to be paid on the income earned. Because basically, companies that have high profitability will pay higher taxes than companies that have lower levels of profitability. The reason is, that corporate income tax will be imposed based on the amount of income received by Law Number 36 of 2008, Article 1, concerning income tax explains that income tax is charged to tax subjects who receive or earn income in the tax year. So that the profitability variable cannot minimize the company's tax burden. Profitability does not affect the tax rate that affects the indicator of the influential tax rate (effective tax rate). This is because companies that have very large profitability have good financial performance. So the company plans its tax based on fiscal profit, not accounting profit. So that the company is considered capable of managing its income and tax payments. Companies with high profitability can make tax payments following regulations. The results of this study are not following agency theory. Agency theory explains that where it should be used can reduce the tax burden. The high profitability of the company causes an influential tax rate. With this condition, management will implement a strategy for determining the efficiency of tax payments. The level of income tends to experience profits with taxes paid by the company, so companies that have a high level of profit will have a tax burden.

#### **6. CONCLUSION**

Based on the phenomenon, research problem, theoretical framework, hypothesis development, results, and discussion, then the following conclusions can be drawn.

The level of debt has no influence on effective tax rate with an effective tax rate (effective tax rate) indicator. This shows that the level of debt of a company can be said to have no influence on the dependent variable, namely management because companies that use debt to attract investors will generate income outside the company's business. This causes the company's profit to increase. This profit will increase the tax burden to be borne by the company. Therefore, debt can have a significant impact, the higher the use of debt in the company, the higher the risk faced and borne by the company. On the other hand, if the company has a lower debt level, it certainly has a smaller risk of loss, especially when the economy is in decline. This illustrates that the company is less successful in carrying out effective tax rates. The results of this study are not in accordance with agency theory. The results of this study are in line with previous research by Wijaya and Febrianti (2017) and Fitriana and Isthika (2021) that the level of debt or debt-to-equity ratio has no influence on effective tax rate.

The capital intensity ratio has no significant influence on effective tax rate. This shows that the higher the capital intensity ratio, the lower the effective tax rate. This is because it is related to the taxation of fixed assets of a company. Companies are allowed to depreciate property, plants, and equipment in accordance with the estimated useful life at company policy, while in taxation fixed assets have a certain useful life which is generally faster than the useful life predicted by the company. The results of this study are in line with previous research by Putri and Lautania (2016) that the capital intensity ratio has no influence on effective tax rate.

Profitability has no influence on effective tax rate with indicators of effective tax rates (effective tax rate). This is because companies that have very large profitability have good financial performance. So the company plans its tax based on fiscal profit rather than on accounting profit. So the company is judged to be able to manage its income and tax payments. Companies with high profitability can make tax payments in accordance with regulations. The results of this study are in line with previous research by Fitriana and Isthika (2021) that profitability has no significant influence on effective tax rate.

There are several limitations in this study, including:

1. The period of time used by researchers to examine the company's financial statements is limited, using only three periods.

2. The independent variable or variable *X* used by the researchers only has three variables, namely the level of debt, capital intensity ratio, and profitability that affect the dependent variable, namely effective tax rate.

3. This study only has a sample of 75 companies from tourism sub-sector companies listed on the Indonesia Stock Exchange (IDX).

4. The value of R-square in the results of this study only has 2.6%, which shows that the other 97.4% is explained by other variables.

Based on the results of the research that has been done, the researchers have several suggestions that can be considered for further research. The sample used in this study is only 25 tourism sub-sector companies listed on the IDX. In future research, it is recommended to add as many samples as possible with more than 50 data, for example, adding years of research. The larger the sample size, the better the research. It is recommended to replace population research with other sub-sectors, and look for companies that have positive profits. Subsequent research is expected to explore new independent variables that are sufficient to influence effective tax rate using different proxies.

#### REFERENCES

1. Afifah, M. D., & Hasymi, M. (2020). Pengaruh profitabilitas, leverage, ukuran perusahaan, intensitas aset tetap dan fasilitas terhadap manajemen pajak dengan indikator tarif pajak efektif [The effect of profitability, leverage, company size, intensity of fixed assets and facilities on tax management with effective tax rates indicators]. *Journal of Accounting Science*, 4(1), 29–42. https://jas.umsida.ac.id/index.php/jas/article/view/398/406?download=pdf



- 2. Andeswari. (2018). *Effect of profitability, capital intensity ratio, leverage, sales growth, company size, political connection and good corporate governance on tax avoidance* [Doctoral dissertation, Indonesian Islamic University]. DSpace Repository. https://dspace.uii.ac.id/handle/123456789/12263
- 3. Andhari, P. A. S., & Sukartha, I. M. (2017). Effect of disclosure of corporate social responsibility, profitability, inventory intensity, capital intensity and leverage on tax aggressiveness. *E-Jurnal Akuntansi Universitas Udayana*, *18*(3), 2115–2142. https://ojs.unud.ac.id/index.php/Akuntansi/article/view/25794/18041
- 4. Anggraeni, T., & Oktaviani, R. M. (2021). Dampak *thin capitalization*, profitabilitas, dan ukuran perusahaan terhadap tindakan penghindaran pajak. *Jurnal Akuntansi dan Pajak*, *21*(2), 2021, 390–397. https://doi.org/10.29040/jap.v21i02.1530
- 5. Antari, N. W. D., & Ery Setiawan, P. (2020). Effect of profitability, leverage and tax avoidance audit committee. *E-Jurnal Akuntansi, 30*(10), 2591–2603. https://doi.org/10.24843/eja.2020.v30.i10.p12
- 6. Apsari, A. A. N. C., & Supadmi, N. L. (2018). Pengaruh kompensasi eksekutif, koneksi politik, dan capital intensity pada tax avoidance. *E-Jurnal Akuntansi*, *25*(2), 1481–1505. https://doi.org/10.24843/EJA.2018.v25.i02.p25
- 7. Ardyansah, D., & Zulaikha. (2014). Pengaruh size, leverage, profitabilitas, capital intensity ratio dan komisaris independen terhadap effective tax rate (ETR). *Diponegoro Journal of Accounting*, *3*(2), 2337–3806. https://ejournal3.undip.ac.id/index.php/accounting/article/view/6110
- 8. Ariesta, R. P., & Latifah, L. (2017). Pengaruh kesadaran wajib pajak, sanksi perpajakan, sistem administrasi perpajakan modern, pengetahuan korupsi, dan tax amnesty terhadap kepatuhan wajib pajak di KPP pratama Semarang. *Akuntansi Dewantara*, *1*(2), 173–187. https://jurnal.ustjogja.ac.id/index.php/akuntansidewantara /article/view/1608
- 9. Aryanti, E. S., & Gazali, M. (2019). Pengaruh keuntungan perusahaan, tingkat utang, dan aset tetap terhadap manajemen pajak perusahaan manufaktur sektor industri dasar dan kimia sub sektor logam dan sejenisnya di Bursa Efek Indonesia (BEI) periode 2014-2017 [The influence of company profit, debt level, and fixed assets on effective tax rate of manufacturing companies basic industrial and chemical sub sector metals and their survey on the Indonesia Stock Exchange (IDX) for the 2014-2017 period]. In *Proceedings of the 2nd National Expert Seminar* (pp. 2.10.1-2.10.5). https://www.e-journal.trisakti.ac.id/index.php/pakar/article/download/4241/3367
- 10. Bendickson, J., Muldoon, J., Liguori, E. W., & Davis, P. E. (2016). Agency theory: Background and epistemology. *Journal of Management History*, 22(4), 437-449. https://doi.org/10.1108/JMH-06-2016-0028
- 11. Central Bureau of Statistics. (2019). Jumlah kunjungan wisman ke Indonesia Desember 2019 mencapai 1,38 juta kunjungan [The number of foreign tourist visits to Indonesia in December 2019 reached 1.38 million visits]. Badan Pusat Statistik (BPS). https://www.bps.go.id/pressrelease/2020/02/03/1711/sum-kunjungan-wisman-ke-indonesia-desember-2019-menreach-1-38 -million-views-.html
- 12. Comanor, W. S., & Wilson, T. A. (1967). Advertising market structure and performance. *The Review of Economics and Statistics*, *49*(4), 423–440. https://doi.org/10.2307/1928327
- 13. Destiny, M., & Bahari, F. (2021). Evaluation of tax administration and tax management at the distributor of PT Pertamina Lubricants (Case study at PT Etam Wira Utama, distributor of PT Pertamina Lubricant for North Kalimantan and Berau). *International Journal of Scientific and Research Publications*, *11*(5), 79–85. https://doi.org/10.29322/IJSRP.11.05.2021.p11312
- 14. Dwiyanti, I. A. I., & Jati, I. K. (2019). Pengaruh profitabilitas, capital intensity, dan inventory intensity pada penghindaran pajak. *E-Jurnal Akuntansi, 27*(3), 2293–2321. https://doi.org/10.24843/EJA.2019.v27.i03.p24
- 15. Fitriana, E., & Isthika, W. (2021). Pengaruh size, profitabilitas, leverage dan capital intensity ratio terhadap manajemen pajak [The influence of size, profitability, debt to equity ratio and capital intensity ratio on effective tax rate]. *Journal of Accounting Research*, *11*(1), 18–33. https://doi.org/10.36733/juara.v11i1.2822
- 16. Gewar, M. M., & Suryantin, N. S. (2020). The influence of debt to equity ratio, managerial ownership, and dividend policy on hedging decisions in manufacturing companies. *American Journal of Humanities and Social Sciences Research (AJHSSR), 4*(1), 382–389. https://www.ajhssr.com/wp-content/uploads/2020/01/ZZ2041382389.pdf
- 17. Ghozali, I. (2018). Application of multivariate analysis with IBM SPSS 25 program (9th ed.). Universitad Diponegoro.
- 18. Griffin, R. W., & Lopez, Y. P. (2005). "Bad behavior" in organizations: A review and typology or future research. *Journal of Management*, *31*(6), 988–1005. https://doi.org/10.1177/0149206305279942
- 19. Hadi, S. S., & Saputri, R. D. A. (2018). Analysis of the contribution of motorized vehicle tax to regional original revenue at BPRD DKI Jakarta. *Moneter, 5*(2), 185–194. https://ejournal.bsi.ac.id/ejurnal/index.php/moneter/article/view/4535
- 20. Handayani, R. (2018). Pengaruh return on assets (ROA), leverage dan ukuran perusahaan terhadap tax avoidance pada perusahaan perbankan yang listing di BEI periode tahun 2012–2015 [The influence of return on assets (ROA), debt to equity ratio and company size on tax avoidance in banking companies listed on the IDX for the period of 2012–2015]. *Jurnal Akuntansi*, *10*(1), 72–84. https://doi.org/10.28932/jam.v10i1.930
- 21. Harry, I. (2015). Financial statement analysis (1st ed.). Center for Academic Publishing Services.
- 22. Iriyadi, I., Tartilla, N., & Gusdiani, R. (2020). The effect of tax planning and use of assets on profitability with good corporate governance as a moderating variable. In *Proceedings of the 2nd International Seminar on Business, Economics, Social Science and Technology (ISBEST 2019)* (pp. 220–227). Atlantis Press SARL. https://doi.org/10.2991/aebmr.k.200522.043
- 23. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, *3*(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X
- 24. Lanis, R., & Richardson, G. (2013). Corporate social responsibility and tax aggressiveness: A test of legitimacy theory. *Accounting, Auditing & Accountability Journal, 26*(1), 75–100. https://doi.org/10.1108/09513571311285621
- 25. Law Number 36 of 2008 concerning the Fourth Amendment to Law Number 7 of 1983 concerning Income Tax. https://www.expat.or.id/info/2008-IncomeTaxSDSN-Amendment.pdf
- 26. Lestari, K. C., & Wulandari, S. O. (2019). Pengaruh profitabilitas terhadap manajemen laba (Studi kasus pada bank yang terdaftar di bei tahun 2016–2018) [The influence of profitability on profit managmement (Case study on banks listed on IDX 2016–2018)]. *Jurnal Akademi Akuntansi, 2*(1), 20–35. https://ejournal.umm.ac.id /index.php/jaa/article/download/7878/6713/24075
- 27. Lumbantoruan, S. (1994). *Tax accounting*. Gramedia Widiasarana Indonesia.
- 28. Masri, I., & Martani, D. (2012). Tax avoidance behaviour towards the cost of debt. *International Journal of Trade* and Global Markets (IJTGM), 7(3), 235-249. https://doi.org/10.1504/IJTGM.2014.064911

VIRTUS

- 29. Masrurroch, L. R., Nurlaela, S., & Fajri, R. N. (2021). Pengaruh profitabilitas, komsaris independen, leverage, ukuran perusahaan dan intensitas modal terhadap tax avoidance. INOV a S I, 17(1), 82-93.
- 30. Maulana, I. A. (2020). Faktor-faktor yang mepengaruhi agresivitas pajak pada perusahaan properti dan real estate. Krisna: Kumpulan Riset Akuntansi, 11(2), 155-163. https://www.ejournal.warmadewa.ac.id/index.php /krisna/article/view/1178
- 31. Murwaningsari, E., & Rachmawati, S. (2017). The influence of capital intensity and investment opportunity set toward conservatism with managerial ownership as moderating variable. Journal of Advanced Management Science, 5(6), 445-451. https://doi.org/10.18178/joams.5.6.445-451
- 32. Noviatna, H., Zirman, & Safitri, D. (2021). Pengaruh profitabilitas, leverage, capital intensity ratio dan komisaris independen terhadap manajemen pajak [Influence of profitability, debt to equity ratio, capital intensity ratio and independent commissioner on effective tax rate]. Jurnal Akuntansi Keuangan dan Bisnis, 14(1), 93-102. https://doi.org/10.35143/jakb.v14i1.4365
- 33. Nurjanah, M., Diatmika, I.G., & Yasa, I.P. (2017). Pengaruh profitabilitas, capital intensity ratio. size dan leverage perusahaan pada manajemen pajak (Studi kasus pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia periode 2013-2016) [The influence of company profitability, capital intensity ratio, size and debt to equity ratio on effective tax rate (Case study on manufacturing companies listed on the Indonesia Stock period)]. Exchange 2013-2016 JIMAT (Jurnal Ilmiah Mahasiswa Akuntansi) Undiksha, 8(2). https://ejournal.undiksha.ac.id/index.php/S1ak/article/view/13354
- 34. Panda, B., & Leepsa, N. M. (2017). Agency theory: Review of theory and evidence on problems and perspectives. Indian Journal of Corporate Governance, 10(1), 74-95. https://doi.org/10.1177/0974686217701467
- Pohan, C. A. (2016). Influenceive tax rate: Tax and business planning strategies. PT. Main Library Gramedia. 35.
- 36. Prasatya, R. E., Mulyadi, J., & Suyanto, S. (2020). Karakter eksekutif, profitabilitas, leverage, dan komisaris independen terhadap tax avoidance dengan kepemilikan institusional sebagai variabel moderasi. Jurnal Riset Akuntansi & Perpajakan (JRAP), 7(2), 153-162. https://doi.org/10.35838/jrap.2020.007.02.13
- 37. Prasetyo, A., & Wulandari, S. (2021). Capital intensity, leverage, return on asset, dan ukuran perusahaan terhadap agresivitas pajak. Journal Accounting, 13(1), 134-147. https://doi.org/10.28932/jam.v13i1.3519
- 38. Pratiwi, N. P. D., & Oktaviani, I. M. (2021). The effect of financial distress, leverage and sales growth on tax avoidance in manufacturing companies listed on the IDX in 2016. Journal of Kharisma, 2(1), 202-211.
- 39. Putri, C. L., & Lautania, M. F. (2016). Pengaruh capital intensity ratio, inventory intensity ratio, ownershipstrucutre dan profitability terhadap effective tax rate (ETR) (Studi pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia Tahun 2011-2014). Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi (JIMEKA), 1(1), 101-119. https://media.neliti.com/media/publications/188375-ID-pengaruh-capital-intensity-ratio-invento.pdf
- 40. Rinaldi, & Cheisviyanny, C. (2015). The influence of profitability, company size and fiscal loss compensation on tax avoidance. National Economic Management and Accounting Seminar (SNEMA) Faculty of Economics, Padang State University.
- Rodríguez, E. F., & Arias, A. M. (2014). Determinants of the effective tax rate in the BRIC countries. Emerging 41. Markets Finance & Trade, 50(sup3), 214-228. https://doi.org/10.2753/REE1540-496X5003S313
- Sadewo, G. N., & Hartiyah, S. (2017). The influence of compensation management, auditor's reputation, 42 profitability and debt to equity ratio on effective tax rate on management on conventional banking companies listed on the IDC for the period of 2011-2015.
- 43. Sari, D., Wardani, R. K., & Lestari, D. F. (2021). The influence of debt to equity ratio, profitability and company size on tax avoidance (An empirical study on mining sector companies listed on Indonesia Stock Exchange Turkish Journal of Computer and Mathematics Education, period 2013-2019). 12(4),860-868. https://turcomat.org/index.php/turkbilmat/article/download/574/378/981
- 44. Serli, & Suhartono, S. E. (2021). Pengaruh ukuran perusahaan, tingkat hutang, profitabilitas perusahaan, dan corporate aovernance terhadap manaiemen paiak pada perusahaan manufaktur vana terdaftar di Bursa Efek Indonesia periode 2017-2019 [The influence of company size, debt level, company profitability, and corporate governance on effective tax rate on manufacturing companies listed on the Indonesia Stock Exchange for the 2017-2019 period]. http://eprints.kwikkiangie.ac.id/1975/10/Resume.pdf
- 45. Shaidurova, N., & Homokyová, M. (2020). The methodology of tax records for the support of tax management. Social Sciences, 3(1), 720-731. https://doi.org/10.2478/mape-2020-0060
- 46. Sinaga, C. H., & Suardikha, I. M. S. (2019). The effect of leverage and capital intensity on tax avoidance with the proportion of independent commissioners as moderating variables. Udayana University Accounting E-Journal, 27(1), 1-32. https://ojs.unud.ac.id/index.php/Akuntansi/article/view/45636
- 47. Sinaga, R. R., & Sukartha, I. M. (2018). Pengaruh profitabilitas, capital intensity ratio, size, dan leverage pada manajemen pajak perusahaan manufaktur di Bursa Efek Indonesia periode 2012-2015 [The influence of profitability, capital intensity ratio, size, and debt to equity ratio on effective tax rate of manufacturing companies on the Indonesia Stock Exchange for the 2012-2015 period]. Udayana University Accounting E-Journal, 22(3), 2177-2203. https://doi.org/10.24843/EJA.2018.v22.i03.p20
- 48. Sugivono, P. D. (2017). *Quantitative, auditative, and R&D research methods*. Alphabeta.
- 49. Suyanto, K. D., & Supramono, S. (2012). Liquidity, leverage, independent commissioner, and profit management against corporate tax aggressiveness. Journal of Finance and Banking, 16(2), 167-177. https://jurnal.unmer.ac .id/index.php/jkdp/article/view/1057
- 50. Tang, P., & Bussink, H. (2017, September). EU tax revenue loss from Google and Facebook. The Dutch delegation of the Labor Party (PvdA) in the Group of the Progressive. https://static.financieel-management.nl/documents/16690/EU-Tax-Revenue-Loss-from-Google-and-Facebook.pdf
- 51. The Ministry of Tourism. (2018). Annual report 2017-18. Government of India. https://tourism.gov.in/sites/default /files/2019-10/Annual%20Report2017-18.pdf
- 52. Tiaras, I., & Wijaya, H. (2015). Pengaruh likuiditas, leverage, manajemen laba, komisaris independen dan ukuran perusahaan terhadap agresivitas pajak. Jurnal Akuntansi, 19(3), 380-397. https://doi.org/10.24912/ja.v19i3.87
- 53. Triyanti, N. W., Titisari, K. H., & Dewi, R. R. (2020). Pengaruh profitabilitas, size, leverage, komite audit, komisaris independen dan umur perusahaan terhadap tax avoidance. Jurnal Ilmiah Universitas Batanghari Jambi (JIUBJ), 20(1), 113-120. http://ji.unbari.ac.id/index.php/ilmiah/article/view/850

VIRTUS

- 54. Wijaya, S. E., & Febrianti, M. (2017). The influence of size, debt to equity ratio, profitability, inventory intensity and corporate governance on effective tax rate. Journal of Business and Accounting, 274-280.
- 55. Wijayanti, R., & Muid, D. (2020). Pengaruh size, leverage, profitability, inventory intensity, corporate governance, dan capital intensity ratio terhadap manajemen pajak (Studi empiris pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia periode 2016–2018) [The influence of size, debt to equity ratio, profitability, inventory intensity, corporate governance, and capital intensity ratio on effective tax rate (Empirical study on manufacturing companies listed on the Indonesia Stock Exchange 2016–2018)]. *Diponegoro Journal of Accounting*, 9(4), 1–12. https://ejournal3.undip.ac.id/index.php/accounting/article/view/29101
- 56. Yunia, S. (2020). Pengaruh good corporate governance, profitabilitas, dan tingkat hutang perusahaan terhadap manajemen pajak (Studi empiris pada perusahaan property dan real estate yang terdaftar di Bursa Efek Indonesia periode 2014-2017) [Influence of good corporate governance, profitability, and level of corporate debt on effective tax rate (Empirical study of property and real estate companies listed on the Indonesia Stock Exchange 2014-2017)] [Bachelor's thesis, Universitas Buddhi Dharma Tangerang]. http://repositori.buddhidharma.ac.id/723/1/Shilvi%20Yunia%20-%2020160100016.pdf
- 57. Zahra, F. (2017). *Pengaruh corporate governance, profitabilitas, dan capital intensity terhadap penghindaran pajak* [Thesis, Syarif Hidayatullah State Islamic University]. UIN Syarif Hidayatullah Institutional Repository. http://repository.uinjkt.ac.id/dspace/handle/123456789/41134
- 58. Zainuddin, & Anfas. (2021). Pengaruh profitabilitas, leverage, kepemilikan institusional dan capital intensity terhadap penghindaran pajak di Bursa Efek Indonesia. *Journal of Economic, Public, and Accounting (JEPA), 3*(2), 85–102. https://doi.org/10.31605/jepa.v3i2.918
- 59. Zeng, T. (2019). Relationship between corporate social responsibility and tax avoidance: International evidence. *Social Responsibility Journal, 15*(2), 244–257. https://doi.org/10.1108/SRJ-03-2018-0056
- 60. Zoebar, M. K. Y., & Miftah, D. (2020). Pengaruh corporate social responsibility, capital intensity dan kualitas audit terhadap penghindaran pajak. *Trisakti Journal of Master of Accounting*, *7*(1), 25-40. https://doi.org/10.25105/jmat.v7i1.6315

VIRTUS