

## **Taxing Corporations in ASEAN: Exploring the Impact of Tax Rates on the Tax Base (2003-2022)**

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### *Abstract*

*This study investigates the impact of corporate income tax rate (CIT) reductions on the corporate tax base in four ASEAN countries, Indonesia, Malaysia, Singapore, and Thailand, from 2003 to 2022. Despite CIT reductions aimed at attracting investment and enhancing competitiveness, corporate tax revenue in the region has stagnated, raising concerns about the effectiveness of these policies. Using a two-stage least squares (2SLS) regression with instrumental variables to address potential endogeneity, the study examines the relationship between the corporate tax base and various factors, including CIT rates, lagged corporate tax base, other countries' CIT rates, top personal income tax rates, export prices, labor costs, and economic growth. Findings reveal that the statutory corporate income tax rate does not have a statistically significant effect on the corporate tax base, suggesting that changes in headline tax rates alone do not explain variations in corporate taxable income in ASEAN countries. In contrast, the average corporate income tax rate of neighboring countries has a significant negative effect on the domestic tax base, indicating the presence of regional tax competition. Other control variables, including labor costs, export prices, and the top personal income tax rate, are statistically insignificant, suggesting that institutional and structural factors shape the corporate tax base. The study contributes by providing region-specific evidence that corporate tax base dynamics in ASEAN are shaped more by cross-border tax interactions and institutional persistence than by domestic rate adjustments. From a policy perspective, the findings suggest that strengthening tax administration, broadening the tax base, and enhancing regional coordination may be more effective than unilateral changes in statutory tax rates.*

*Keywords: corporate income tax, tax base, ASEAN, instrumental variables, tax policy.*

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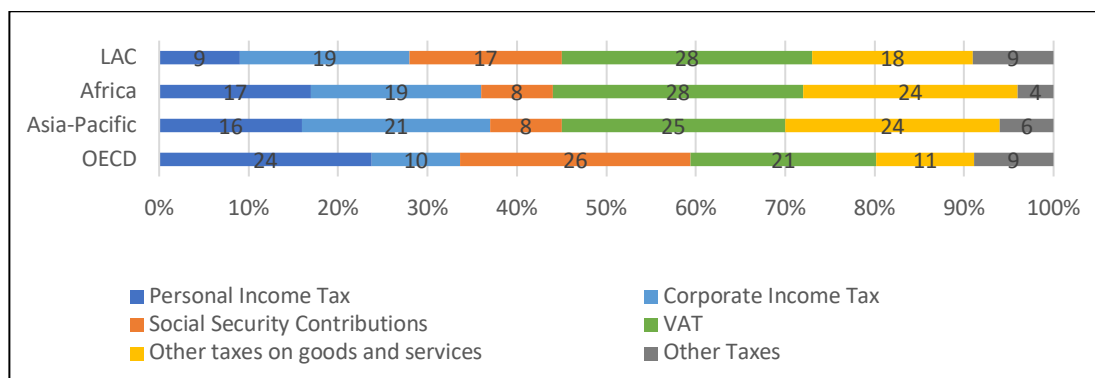
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## 1. INTRODUCTION

Tax policy plays a central role in shaping macroeconomic performance, influencing economic growth, income distribution, and government revenue capacity (Hidayat, 2014; Rasji et al., 2023). In the context of corporate taxation, statutory tax rates affect firms' location decisions, investment behavior, and reported profits. When tax rates are relatively high, corporations may respond by reallocating activities across jurisdictions, engaging in tax planning strategies, or reducing domestic investment, thereby altering the size of the taxable income base (Matsumoto, 2022). These behavioral responses highlight the importance of understanding not only tax rates themselves but also their interaction with the corporate tax base.

Corporate income tax (CIT) constitutes a significant component of government revenue, particularly in developing and emerging economies. According to Stiglitz (1999), income taxation contributes to fiscal equity by requiring individuals and corporations to contribute to financing public expenditure in proportion to their economic capacity. This principle aligns closely with the ability-to-pay concept, under which higher-income entities are expected to bear a larger tax burden (Musgrave & Musgrave, 1989). In practice, however, the effectiveness of corporate taxation depends on the stability and responsiveness of the tax base, which may be sensitive to policy changes and international economic integration.

In the Asia–Pacific region, corporate income tax represents a substantial share of total tax revenue. As illustrated in Figure 1, corporate income tax accounts for approximately 21% of total tax revenue in the region, exceeding the corresponding shares in several other regions. This reflects the continued reliance on corporate taxation as a revenue source, especially in countries where personal income tax bases remain relatively narrow (Benitez et al., 2023). For ASEAN countries, corporate taxation therefore plays a dual role: it serves as a key revenue instrument while simultaneously acts as a policy lever to enhance international competitiveness.



**Figure 1.** Comparison of Average Tax Structures by Regional Area in 2022 (Percentage of Total Tax Revenue)

Over the past two decades, ASEAN countries have experienced a sustained downward trend in statutory corporate income tax rates. Between 2003 and 2022, Indonesia reduced its CIT rate from 30% to 22%, Malaysia from 28% to 24%, Singapore from 22% to 17%, and Thailand from 30% to 20%. These reductions occurred alongside broader global trends, where average CIT rates in OECD countries declined from above 30% in the early 2000s to approximately 23% by 2022 (OECD, 2024). The convergence of ASEAN tax policies toward lower statutory rates

reflects increasing capital mobility and intensified competition for foreign direct investment (FDI).

This pattern of tax rate reductions is often described as a “race to the bottom,” a phenomenon in which countries strategically lower corporate tax rates to attract mobile capital and prevent profit shifting to lower-tax jurisdictions (Dahlby & Ferede, 2012). Within ASEAN, this dynamic is reinforced by geographic proximity, economic integration, and relatively similar production structures. Countries may perceive tax reductions as necessary to maintain competitiveness when neighboring jurisdictions adopt lower rates. However, while such policies may support short-term investment inflows, they can also exert downward pressure on corporate tax revenues if reductions in tax rates are not offset by corresponding expansions in the tax base (Tobing & Mukarromah, 2015).

Indonesia, Malaysia, Singapore, and Thailand represent the four largest economies in ASEAN, collectively accounting for the majority of the region’s GDP. Their dominance contrasts with smaller ASEAN members such as Cambodia, Laos, and Myanmar, which rely more heavily on consumption taxes and trade-related revenues due to narrower corporate sectors and lower levels of industrialization. The four countries examined in this study exhibit more diversified economic structures, deeper financial markets, and higher levels of corporate activity, making them particularly exposed to international tax competition and corporate income shifting behavior.

In addition to strong GDP performance, these four ASEAN countries rank highest in the Ease of Paying Taxes (EOPT) score among ASEAN nations. A higher EOPT score indicates a more efficient, transparent, and compliance-friendly tax system. According to Thomas (2017), an efficient tax system reduces dishonesty and encourages accurate reporting, as individuals are more likely to comply when the process is straightforward. Consequently, this can lead to increased participation of individuals and businesses in the tax system, thereby expanding the tax base.

While these countries demonstrate efficiency in their tax systems, as reflected in their high EOPT scores, tax avoidance remains a major challenge hindering the optimization of state revenue (World Bank, 2020; Thomas, 2017). Companies, particularly multinational corporations, actively seek ways to minimize their tax burden, ultimately affecting national tax revenue ratios. Globalization and regional economic integration further exacerbate this issue by enabling corporations to manage their operations and finances across multiple jurisdictions (Brauner & Stewart, 2013; Dharmapala, 2008).

Previous studies, such as Dahlby & Ferede (2012) and Riedl & Rocha-Akis (2009), have examined the elasticity of the tax base in response to tax rate changes. However, cross-country studies within ASEAN remain limited, particularly in understanding the effects of the lagged tax base and the contributions of variables such as labor costs and export prices to corporate profitability. Therefore, this study aims to fill this gap by exploring the impact of CIT rates on the tax base in ASEAN from 2003 to 2022.

This study considers inter-country tax rate interactions as control variables while also identifying the influences of economic growth and export contributions on the tax base. Assessing taxpayer responses to corporate tax rates is crucial for

evaluating tax rate implications and the effectiveness of tax policies in Indonesia, Malaysia, Singapore, and Thailand in optimizing CIT revenue amid increasingly competitive global conditions.

## **2. LITERATURE REVIEW**

The tax base, defined as the amount of taxable income, is a fundamental element in the taxation system that serves as the basis for calculating tax liabilities. The dynamics of tax rates significantly influence taxpayer behavior, particularly among corporations, in determining tax strategies and profit management. An increase in tax rates can encourage companies to implement various strategies to minimize their tax base and avoid increased tax burdens. These strategies, such as delaying investments or expenditures, increasing operational costs, transfer pricing, and exploiting legal loopholes, have been studied and proven effective in reducing the tax base (Feldstein, 1995; Riedl & Rocha-Akis, 2009).

On the other hand, a reduction in tax rates can potentially increase the tax base. With a lower tax burden, companies may be more motivated to invest, enhance productivity, and ultimately report higher profits (Dahlby & Ferede, 2012). The magnitude of the impact of tax rate changes on the tax base is also influenced by the tax base's elasticity. The more elastic the tax base, the greater the effect of the tax rate changes. Companies with many options to reduce their reported profits will have a more elastic tax base.

Tax competition theory highlights that corporate tax policies are not determined in isolation. Gordon and MacKie-Mason (1995) argue that in small open economies, governments face constraints in setting high corporate tax rates due to the risk of capital outflows and profit shifting as supported by empirical evidences from OECD countries. The evidences show that corporate tax bases are responsive not only to domestic tax rates but also to those of neighboring countries (Devereux et al., 2014; Riedl & Rocha-Akis, 2009). When other countries lower their tax rates, firms may relocate their real activities or shift profits to those jurisdictions, thereby eroding the domestic tax base.

Comparative studies between OECD and non-OECD countries reveal notable differences in corporate tax responsiveness. OECD countries generally exhibit broader tax bases, stronger enforcement mechanisms, and more sophisticated anti-avoidance rules, which can moderate the sensitivity of the tax base to changes in the statutory tax rate (Devereux, 2007). In contrast, developing and emerging economies, including many ASEAN countries, tend to rely more heavily on corporate income tax revenue while facing greater challenges related to tax administration and profit shifting (Benitez et al., 2023). This structural difference suggests that the effects of tax rate changes on the tax base in ASEAN may differ from those observed in OECD contexts, underscoring the need for region-specific empirical analysis.

Lower tax rates in other countries can attract companies to relocate their operations to those jurisdictions (Dahlby & Ferede, 2012; Fossen & Steiner, 2018). Firm-level behavior related to tax planning and governance further complicates the relationship between statutory tax policy and observed tax outcomes, as companies may adjust reporting strategies independently of changes in tax rates (Natalia et al,

2021). This can reduce the corporate income tax (CIT) base, as profits previously generated domestically are now reported in another country. This strategic behavior is part of a series of responses that companies may use, including tax planning and tax avoidance, to optimize their tax obligations. Furthermore, the elasticity of corporate taxable income, as explored by Devereux et al. (2014), indicates that companies may also shift income between different tax bases within a country, such as declaring income as salaries instead of corporate profits, or vice versa, to take advantage of lower tax rates. In regional settings such as ASEAN, tax competition extends beyond statutory rate adjustments to include selective incentives and preferential regimes that affect firms' location and reporting decisions (Pitaloka & Slamet, 2025).

The gap between the top personal income tax (PIT) rate and the corporate income tax (CIT) rate plays an important role in shaping business formation and income reporting decisions. When the top PIT rate exceeds the CIT rate, individuals—particularly high-income earners and owner-managers—may have an incentive to incorporate their economic activities to benefit from lower corporate taxation. This mechanism operates through income shifting, whereby income that would otherwise be reported as personal income is instead declared as corporate profit (Gordon & MacKie-Mason, 1995; Riedl & Rocha-Akis, 2009). As incorporation increases, the aggregate corporate tax base may expand, even if overall economic activity remains unchanged.

Empirical evidences from OECD countries support this mechanism. Riedl and Rocha-Akis (2009) find that a wider PIT–CIT differential is associated with higher reported corporate taxable income, reflecting income reclassification rather than real increases in production. De Mooij and Nicodème (2008) similarly document that incorporation decisions are sensitive to relative tax rates, particularly in environments with flexible business-organizational forms. However, the strength of this effect may vary across countries depending on institutional factors such as compliance costs, regulatory barriers to incorporation, and enforcement capacity.

In the context of ASEAN countries, the impact of the PIT–CIT tax gap on the corporate tax base is theoretically ambiguous. While differences in statutory rates may create incentives for income shifting, incorporation decisions in developing and emerging economies are often influenced by non-tax factors, including administrative complexity, access to finance, and the informal nature of economic activities. Consequently, although a higher top PIT rate is expected to positively influence the corporate tax base through increased incorporation and income shifting, the magnitude of this effect is ultimately an empirical question.

Corporate income reported as taxable income is positively influenced by sales volume and negatively influenced by input costs (Riedl & Rocha-Akis, 2009). These costs are a crucial component of a company's operating expenses and can directly impact profitability. When labor costs increase, operational surpluses—a component of taxable corporate income—may decline if the companies are unable to pass these costs on to consumers through higher prices. This relationship is highlighted in the context of profitability, where higher labor costs can reduce corporate taxable income by increasing cost bases (Riedl & Rocha-Akis, 2009).

Additionally, the elasticity of the corporate tax base with respect to tax rates indicates that changes in labor costs can alter the size of the corporate sector,

thereby affecting the tax base and overall revenue (Devereux et al., 2014). Overall, labor costs are an essential factor in determining corporate taxable income, interacting with various economic and policy variables to shape tax liabilities and corporate financial health. Therefore, labor costs are included in the estimation as a variable influencing the tax base.

Several studies suggest that exports positively impact corporate profitability, particularly in the manufacturing sector (Dahlby & Ferede, 2012; Riedl & Rocha-Akis, 2009). This increase in profitability can lead to higher reported corporate taxable income, assuming other factors remain constant. Exports are a key determinant of reported profits, which are positively influenced by sales volume and negatively impacted by input costs such as real unit labor costs (Riedl & Rocha-Akis, 2009). To capture this potential impact, the estimation includes export prices. Export prices reflect changes in the prices of goods and services sold by a country's residents to foreign buyers, which are significantly influenced by exchange rate fluctuations.

Overall, corporate profitability, as a tax base, can be affected by various economic factors. Consequently, economic growth can increase corporate taxable income by boosting profits and expanding the tax base. Higher economic activity drives demand for goods and services, leading to increased sales and, consequently, higher corporate profits. As profits rise, so do taxable incomes, thereby they increase corporate tax revenues.

Furthermore, as highlighted in studies by Karpowicz & Majewska (2018) and Riedl & Rocha-Akis (2009), there is a positive correlation between corporate sector profitability and Gross Domestic Product (GDP). This fact suggests that GDP per capita growth is likely to be accompanied by an increase in corporate sector profitability. The rationale behind this relationship is that business cycles can influence profitability. Therefore, in this study, the tax base variable is controlled by including the real GDP growth rates. This is to ensure that business-cycle factors will not influence the research findings; rather, they will reflect the fundamental relationship between per capita GDP and corporate-sector profitability.

### 3. METHODOLOGY

This study employs a quantitative approach using panel data regression analysis. This method has the advantage of uncovering causal relationships between variables by accommodating country-specific variations and changes over time. The research data are sourced from reputable international institutions, such as the IMF, Tax Foundation, World Bank, OECDstat, and CEIC Data. The data range from the period of 2003 to 2022 and focus on four ASEAN countries: Indonesia, Malaysia, Singapore, and Thailand. The research variables include the tax base ( $b$ ), corporate income tax rate ( $\tau$ ), tax rates in other countries ( $\bar{\tau}$ ), top personal income tax rate ( $pit$ ), labor costs ( $cost$ ), export prices ( $export$ ), and economic growth ( $growth$ ).

The tax base variable is proxied by taxable income, which represents the total taxable revenue of all corporations recorded in a country's tax reports. Following Hidayat (2014) and Riedl & Rocha-Akis (2009) state that taxable income is derived from corporate income tax revenue by dividing the total corporate income tax

collected by the applicable corporate income tax rate in the same period, as shown in the following formula:

$$\text{Taxable Income}_t = \frac{\text{CIT Revenue}_t}{\text{CIT Rate}_t} \dots\dots\dots(1)$$

This calculation assumes full taxpayer compliance, without accounting for tax evasion.

Corporate income tax revenue data are published in millions of dollars, while corporate tax rate data is expressed as a percentage. Consequently, the tax base variable is measured in millions of dollars. To account for differences in country size, taxable income for each country is divided by the GDP deflator, enabling cross-regional comparisons. The use of the GDP deflator is preferred over nominal GDP or GDP per capita because it isolates real changes in economic value by removing inflation's effects. Unlike nominal GDP, which may overstate changes in the tax base due to price-level fluctuations, the GDP deflator reflects changes in the general price level of domestically produced goods and services. GDP per capita, while useful for welfare comparisons, does not directly capture changes in aggregate production relevant to corporate profitability. Therefore, adjusting taxable income by the GDP deflator allows for a more accurate comparison of real corporate tax bases across countries with differing inflation dynamics and economic sizes.

The corporate income tax rate variable is measured as a percentage. The indicator used as a proxy for the corporate tax rate variable is the statutory tax rate, which represents the rate established by law. In this study, the corporate tax rate is considered endogenous and is instrumented using the one-period lag of the tax rate ( $\tau_{(t-1)}$ ) and the one-period lag of the unemployment rate.

The lagged corporate income tax rate is a valid instrument because tax policy decisions typically exhibit persistence over time due to legislative inertia, political constraints, and medium-term fiscal planning. As a result, past tax rates are strongly correlated with current tax rates but are unlikely to be directly affected by contemporaneous shocks to the current tax base.

The lagged unemployment rate is included as an additional instrument based on its relevance to tax policy decisions. Higher unemployment levels may prompt governments to implement tax reductions as part of countercyclical fiscal policy aimed at stimulating investment and job creation. While unemployment conditions influence policymakers' tax rate decisions, the lagged unemployment rate is not expected to directly affect current corporate taxable income once macroeconomic growth and other controls are accounted for. This satisfies the exclusion restriction required for valid instruments.

The corporate income tax rates of other countries are calculated as the average statutory tax rate across all observed countries other than country  $i$  (Riedl & Rocha-Akis, 2009; Dahlby & Ferde, 2012). Mathematically, this variable is constructed using the following equation:

$$\bar{\tau}_{it} = \sum_j \omega_{ij} \tau_{jt} \quad \text{with, } \omega_{ij} = \begin{cases} \frac{1}{n-1}, & j \neq i \\ 0, & j = i \end{cases} \dots\dots\dots(2)$$

where  $i$  and  $j$  represent different countries.  $\omega_{ij}$  denotes the weight assigned to each country in the summation. The weight ( $\omega_{ij}$ ) is defined as a specific value: if  $j$  is not equal to  $i$  (i.e., a foreign country), then  $\omega_{ij}$  is  $\frac{1}{(n-1)}$ . In this formula,  $n$  represents the total number of countries. This implies that each foreign country is considered equally important in the summation ( $\Sigma$ ) (Riedl & Rocha-Akis, 2009). If  $j$  equals  $i$  (i.e., the same country), then  $\omega_{ij}$  is 0, meaning that the country's own tax rate is not included in this calculation. The corporate income tax rates of other countries are also expressed as percentages (%).

The top personal income tax rate is a crucial indicator of how differences between personal and corporate tax rates may incentivize individuals to shift income to corporate entities to reduce tax liabilities (Riedl & Rocha-Akis, 2009). Labor costs, measured as average monthly wages, have a direct relationship with corporate profitability. High labor costs may shrink the tax base, while cost efficiency can enhance corporate competitiveness (Nguyen, 2022). Export prices, calculated using the export price index, indicate that rising international market prices for goods and services can expand the tax base through increased corporate profitability (Dahlby & Ferde, 2012). The economic growth variable, measured as the annual percentage change in real GDP, captures a country's capacity to expand its tax base alongside strong economic growth (Karpowicz & Majewska, 2018).

A logarithmic regression model is employed to assess proportional relationships between variables. Additionally, the model incorporates an autoregressive component, including a lag of the tax base, to capture long-term adjustment dynamics. The corporate income tax rate is determined simultaneously with the domestic tax base. The tax rate can influence corporate behavior in profit determination, such as through tax planning and profit shifting. Conversely, if a country has a large and mobile tax base, it may be more inclined to lower tax rates to attract investment and prevent tax base erosion. This bidirectional relationship suggests that the corporate income tax rate can influence the tax base, and vice versa, creating an endogeneity issue that complicates causal inference.

To address this endogeneity issue, this study employs the instrumental variable (IV) technique. Instruments are variables that correlate with the endogenous explanatory variable (corporate tax rate) but are uncorrelated with the error term. The selected instruments for the corporate tax rate in this study are the one-period lag of the unemployment rate ( $unemp_{it-1}$ ) and the one-period lag of the corporate tax rate itself ( $\tau_{it-1}$ ). The rationale behind this choice is that policymakers often justify tax reductions as a strategy to attract investment and combat unemployment, making these instruments theoretically relevant. This approach ensures that the estimated impact of the corporate tax rate on the tax base is not confounded by reverse causality or omitted variable bias, thereby producing more reliable and valid results.

Following Dahlby & Ferde (2012), this study adopts the Two-Stage Least Squares (2SLS) method. 2SLS is an instrumental variable technique designed to handle cases where one or more explanatory variables in a regression model may be correlated with the error term. This correlation can lead to biased estimates if the Ordinary Least Squares (OLS) method is used.

In the first stage of 2SLS, the endogenous variable is replaced with its predicted values. This is done by regressing the endogenous variable on all exogenous

variables in the model, including the instrumental variables. Instruments are variables that correlate with the endogenous variable but are uncorrelated with the error term. This step isolates the portion of the endogenous variable that is uncorrelated with the error term, thereby reducing bias, as represented in the following equation:

$$\begin{aligned} \log(\tau)_{it} = & \pi_0 + \lambda \log b_{it-1} + \pi_1 \log unemp_{it-1} + \pi_2 \log \tau_{it-1} \\ & + \pi_3 \log \bar{\tau}_{it} + \pi_4 \log pit_{it} + \pi_5 \log cost_{it} \\ & + \pi_6 \log export_{it} + \pi_7 \log growth_{it} + v_{it} \end{aligned} \quad \dots\dots\dots(3)$$

In the second stage, the predicted values obtained from the first stage (Equation 3) are treated as if they were actual data. A standard regression analysis is then conducted using these predicted values. This step provides consistent and unbiased coefficient estimates, even in the presence of endogeneity.

$$\begin{aligned} \log b_{it} = & \beta_0 + \rho \log b_{it-1} + \beta_1 \log \widehat{(\tau)}_{it} + \beta_2 \log \bar{\tau}_{it} + \beta_3 \log pit_{it} \\ & + \beta_4 \log cost_{it} + \beta_5 \log export_{it} + \beta_6 \log growth_{it} + u_{it} \end{aligned} \quad \dots\dots\dots(4)$$

To ensure the result validity, a series of classical assumption tests following Gauss-Markov principles are conducted. The Jarque-Bera Test is used to confirm normality in the residual distribution, while the Breusch-Pagan Test assesses autocorrelation and heteroskedasticity. The Variance Inflation Factor (VIF) is employed to detect multicollinearity among independent variables. Additionally, the validity of the instrumental variables is examined using the Endogeneity Test (Durbin-Wu-Hausman), which determines whether the explanatory variables in the model are endogenous or exogenous, thereby negating the need for instrumental variables. Furthermore, the Weakness Test evaluates instrument strength. An instrument is considered weak if  $Corr(z, x)$  is very low but not zero (Wooldridge, 2013). One way to test for instrument weakness is to examine the F-statistic in the first-stage regression. A low F-value indicates that the instrument may be insufficiently strong, potentially undermining the reliability of the 2SLS estimates. Finally, the Overidentification Test (Hansen J Test) is conducted to verify instrument exogeneity. According to Wooldridge (2013), an instrument must be uncorrelated with the error term (exogeneity) and correlated with the endogenous explanatory variable (relevance).

To ensure the accuracy and validity of the estimation results, this study also validates its analysis by satisfying the Gauss-Markov assumptions. These classical assumption tests ensure that the regression model satisfies the conditions for the estimators to be BLUE (Best Linear Unbiased Estimators). By fulfilling Gauss-Markov assumptions, the model is expected to produce precise estimations of the impact of corporate income tax rate changes on the corporate tax base in the selected ASEAN countries.

Finally, the F-test is used to assess the overall significance of the model while the t-test evaluates the partial effects of each independent variable. The coefficient of determination ( $R^2$ ) is calculated to determine how well the model explains the variability of the dependent variable.

#### 4. RESULT AND DISCUSSION

For several decades, ASEAN has grown into one of the fastest-growing economic regions in the world, with a population of over 650 million and a collective GDP exceeding \$3 trillion. Its diverse member states each contribute to ASEAN's economic landscape. The region's strategic location, coupled with its commitment to economic integration, has positioned ASEAN as a key player in global trade and investment. Through initiatives such as the ASEAN Free Trade Area (AFTA) and the ASEAN Economic Community (AEC), the bloc has aimed to eliminate trade barriers and facilitate greater economic cooperation, despite the persistence of the development gaps among its members.

Among ASEAN members, Indonesia, Malaysia, Singapore, and Thailand hold significant positions as major economic players. A substantial portion of ASEAN's gross domestic product (GDP) is derived from these four countries. In 2022, these nations collectively accounted for nearly 85% of ASEAN's total GDP, reaffirming their central role in shaping the regional economic dynamics.

Indonesia, a country rich in natural resources, is the largest economy in ASEAN, contributing 36% of ASEAN's GDP in 2022, with a total output of approximately \$1.19 trillion. Historically, Indonesia's tax system was underdeveloped, with a tax-to-GDP ratio relatively low compared to other countries in the region, standing at only 9.76% in 2022. The country has a corporate income tax (CIT) rate of 22%, which is considered moderate by regional standards. However, the government has made continuous efforts to improve tax compliance, combat tax evasion, and expand the tax base. Recent tax reforms in Indonesia have focused on digitizing tax administration and introducing tax incentives to attract foreign direct investment (FDI), particularly in the sectors of manufacturing and technology.

Malaysia has a diversified economy spanning oil and gas, manufacturing, and services, contributing 12.5% to ASEAN's GDP in 2022, with a nominal GDP of \$373 billion. In 2018, the country reduced its corporate tax rate to 24%, supplemented by targeted incentives for priority sectors, including tax exemptions for companies in manufacturing and technology. Malaysia's special economic zones and free trade agreements further enhance its attractiveness to international investors. The country's tax-to-GDP ratio, at 11.9% in 2022, reflects a relatively efficient tax system, though concerns remain regarding revenue mobilization to support infrastructure development and social programs.

Singapore is one of the most advanced economies in Southeast Asia, contributing 16% to ASEAN's GDP in 2022, with a nominal GDP of \$488 billion. Singapore has a low-tax system with high compliance, offering a corporate tax rate of 17%, one of the lowest in ASEAN. In addition to its low CIT rate, Singapore provides various incentives, such as the Pioneer Certificate Incentive (PCI) and the Development and Expansion Incentive (DEI), which grant tax exemptions or reduce tax rates for businesses operating in key sectors, including technology, finance, and biomedical. Its efficient tax administration, accompanied by a strong network of double tax agreements, consistently ranks Singapore as one of the top FDI destinations in ASEAN, attracting over \$91 billion in FDI inflows in 2022. The country's tax-to-GDP ratio of 13.5% is relatively high for a low-tax jurisdiction, reflecting an efficient tax administration and a strong corporate sector.

Thailand, the second-largest economy in Southeast Asia, accounted for 21% of ASEAN's total GDP, with a nominal GDP of \$505 billion in 2022. The country's corporate tax system has evolved to support its export-driven industries and economy. In recent years, the Thai government has introduced various tax incentives to encourage investment in high-tech industries such as automotive manufacturing, electronics, and renewable energy, as part of the "Thailand 4.0" economic model. Thailand's Board of Investment offers tax holidays, exemptions, and reductions for businesses in priority sectors, positioning the country as a regional production hub.

The corporate tax base represents taxable business income, which is measured by deducting all business expenses from business revenues over a year, along with applicable deductions and exemptions. The corporate taxable income base can vary due to differences in economic structures, levels of development, and policy objectives of each country. In ASEAN, corporate tax systems share common principles in income calculation and expense deductions but differ in tax rates, foreign income treatment, incentives, and compliance requirements.

The corporate tax base in Indonesia, Malaysia, Singapore, and Thailand has exhibited significant growth and some notable declines. From 2003 to 2007, the four countries experienced strong growth. For instance, Indonesia's tax base increased from \$28.03 billion to \$58.78 billion, and Malaysia's from \$30.52 billion to \$56.68 billion, reflecting robust economic expansion and improved tax compliance. Singapore's tax base surged from \$16.72 billion to \$36.27 billion, benefiting from its role as a business hub, while Thailand increased from \$17.77 billion to \$42.26 billion due to its economic development.

However, the 2008 global financial crisis led to declines across these countries: Indonesia dropped to \$55.42 billion, Malaysia to \$49.88 billion, Singapore to \$34.85 billion, and Thailand to \$39.94 billion, as corporate profits shrank. In 2015, Malaysia experienced another decline, falling from \$66.56 billion in 2014 to \$59.76 billion, likely due to declining oil prices affecting revenues. The most recent decline occurred in 2020 across all four countries due to the COVID-19 pandemic, which severely impacted business activities and corporate profitability, significantly shrinking the tax base. Despite temporary declines, the overall trend indicates sustained growth in the corporate tax base, reflecting broader economic developments and effective tax policy adjustments.

Corporate income tax rates in Indonesia, Malaysia, Singapore, and Thailand from 2003 to 2022 show differing policy adaptations, reflecting each country's strategic fiscal responses to internal and external economic conditions. Indonesia maintained a corporate tax rate of 30% until 2008, then showed a gradual reduction to 25% in 2010, signaling efforts to improve the investment climate and attract foreign capital. In 2021, the rate was lowered to 22% as a policy response aiming at reducing economic pressure from the COVID-19 crisis, fostering economic recovery, and enhancing business resilience in the post-pandemic era. Malaysia took a more measured approach, maintaining a 28% rate until 2007 before reducing it to 26% in 2008 and then to 24% in 2016, reflecting efforts to enhance competitiveness amid declining oil revenues, a significant government income source. Singapore adopted a proactive tax reduction strategy, lowering its tax rate from 22% in 2003 to 17% in 2010, a rate that remains unchanged. This aggressive reduction highlights Singapore's strategy to strengthen its status as a global business hub by leveraging

favorable tax policies to attract multinational corporations and enhance its regional competitiveness. Thailand maintained a relatively stable tax rate of 30% until 2012, then reduced it to 23% and cut it even lower to 20% in 2013. This shift aimed to stimulate economic growth and investment following the severe floods in 2011, which significantly impacted its economy. The tax cuts were intended to restore investor confidence and accelerate economic recovery.

The estimation results from the Two-Stage Least Squares (2SLS) model show the following regression model:

$$\begin{aligned} \log b_{it} = & (-1,5592) + 1,0005 \log b_{it-1} + (-0,0354) \widehat{\log \tau_{it}} \\ & + 0,7154 \log \bar{\tau}_{it} + 0,1311 \log pit_{it} \\ & + 0,1405 \log cost_{it} + 0,0684 \log export_{it} \\ & + 0,0093 growth_{it} + u_{it} \end{aligned} \quad \dots\dots (5)$$

The robustness of this model is supported by several diagnostic tests confirming the validity of the instrumental approach. The endogeneity test yields a p-value of 0.0324, rejecting the null hypothesis that the tax rate is exogenous, justifying the use of instrumental variables. The Cragg-Donald Wald F-statistic of 438.369 exceeds the conventional threshold of 10, indicating that the instrumental variables are exogenous, meaning they are not correlated with the structural equation’s error term and are significantly relevant.

Moreover, the overidentification test using the Sargan statistic shows a p-value of 0.0767, failing to reject the null hypothesis, indicating no evidence of overidentification in the instruments. These diagnostic validations reinforce the model’s estimation and the suitability of the chosen instruments in addressing endogeneity (Wooldridge, 2010).

**Table 2.** Two-Stage Least Squares (2SLS) Estimation Results: Determinants of the Corporate Tax Base in ASEAN-4 Countries

Variable	Coefficient	Std. Error	z-statistic	Prob.
Log lagged tax base ( $b_{it-1}$ )	1,0005	0,0065	153,51	0,000
Log CIT rate ( $\tau$ )	-0,0354	0,1642	-0,22	0,829
Log other countries CIT rate ( $\bar{\tau}$ )	0,7154	0,2681	2,67	0,008
Log top PIT rate ( $pit$ )	0,1311	0,1351	0,97	0,332
Log labor cost ( $cost$ )	0,1405	0,1216	1,15	0,248
Log export price ( $export$ )	0,0684	0,0992	0,69	0,491
Economics growth ( $Growth$ )	0,0093	0,0022	4,22	0,000
Constanta	-1,5592	0,6231	-2,50	0,012
R-Squared			0,9979	
F-Statistics			4794,54	
Prob F-statistics			0,0000	

Source: Data Processed (2025).

The estimation results using the Two-Stage Least Squares (2SLS) model indicate that the lagged tax base variable has a coefficient of 1.005, which is statistically significant. This suggests that a 1% increase in the lagged tax base is correlated with a 1.005% increase in the tax base in the following year, underscoring the persistence of the tax base. This finding is consistent with the studies of Buettner (2003) and Riedl & Rocha-Akis (2009), emphasizing the importance of the past tax base as a predictor of the current tax base.

Conversely, the corporate income tax (CIT) rate does not have a significant effect on the tax base. This finding supports the research of Devereux (2007), which states that tax rates do not always have a direct impact on the tax base due to corporate tax avoidance and tax planning strategies. According to Basri et al. (2019), firms need time to adapt to new administrative practices and regulations, leading to a delayed response in their taxable income. Similarly, the lagged tax base in this study may be associated with various tax administration reforms introduced in ASEAN countries from 2003 to 2022. These reforms include tax system modernization, enhanced tax enforcement, simplification of tax laws, and the introduction of tax incentives.

The corporate income tax rates of other countries have a significant positive effect on the domestic tax base, with a coefficient of 0.7154. There is a 1% increase in the tax rate of other countries that raises the domestic tax base by 0.7154%, supporting the tax competition theory. This result suggests that firms may shift taxable profits across countries based on differences in tax rates. This positive relationship fits the tax competition theory, which suggests that such responses occur because the tax base is internationally mobile. In ASEAN countries with growing economic integration, this effect is expected to be more pronounced. These empirical findings also indicate the presence of horizontal externalities in tax competition within the region (Dahlby & Ferde, 2012; Fossen & Steiner, 2018).

Economic growth also exhibits a significant positive effect on the tax base, with a coefficient of 0.0093. This confirms that a conducive economic environment enhances corporate profitability, thereby expanding the tax base, as stated by Karpowicz & Majewska (2018). This relationship highlights the importance of fostering a favorable economic environment to increase corporate income and tax collection in Indonesia, Malaysia, Singapore, and Thailand, which experience various degrees of economic expansion. Additionally, based on Gruber (2016), enhancing economic growth through infrastructure development and human capital investment can strengthen tax revenue, thereby improving the overall fiscal landscape through tax policy dynamics.

Several explanatory variables in the model, namely the statutory corporate income tax rate, labor costs, export prices, and the top personal income tax rate, do not exhibit statistically significant effects on the corporate tax base. These findings warrant further discussion, particularly considering the theoretical expectations outlined in the literature.

First, the insignificant statutory corporate income tax (CIT) rate suggests that changes in headline tax rates alone may not substantially influence the size of the corporate tax base in the four ASEAN countries studied. This result is consistent with Devereux (2007) and Kawano & Slemrod (2015), who argue that statutory tax rate changes are often accompanied by base-broadening measures, tax incentives, or administrative reforms that offset their direct impact on taxable income. In the ASEAN context, corporate tax rate reductions during the sample period were frequently implemented alongside targeted tax incentives, exemptions, and investment allowances. These accompanying measures may have weakened the direct relation between statutory rates and the observed tax base.

Second, the labor cost variable shows no statistically significant effect on the corporate tax base. While higher labor costs are theoretically expected to reduce

profitability and taxable income, this relationship may be muted in ASEAN economies due to several factors. Firms may adjust to rising labor costs through productivity improvements, automation, or by shifting part of the cost burden to consumers. Moreover, as noted by Nguyen (2022), higher labor costs can incentivize firms, particularly those employing skilled labor, to engage in more sophisticated tax planning strategies, thereby dampening the observable effect of labor costs on reported taxable income. As a result, variations in labor costs may not translate into proportional changes in the corporate tax base.

Third, the insignificant export prices indicates that external demand conditions do not uniformly affect corporate taxable income across countries and sectors. Although export-oriented firms may benefit from favorable export prices, the aggregate effect on the tax base depends on sectoral composition, exchange rate movements, and the extent of tax incentives granted to exporting firms. In ASEAN countries, export-driven sectors often receive preferential tax treatment, such as tax holidays or reduced rates, which may limit the extent to which higher export prices are reflected in reported taxable income. This finding is consistent with Dahlby and Ferede (2012), who note that export performance does not necessarily translate into higher corporate tax bases when preferential tax regimes are present. This muted response may reflect firms' ability to manage cost pressures and external demand shocks through accounting and tax planning strategies, which limits the transmission of real-side fluctuations into taxable income (Natalia et al, 2021; Sumomba, 2012).

Finally, the top personal income tax (PIT) rate does not exhibit a statistically significant relationship with the corporate tax base. Although a higher PIT rate relative to the CIT rate may encourage income shifting through incorporation, this mechanism may be less pronounced in ASEAN countries. Incorporation decisions in developing and emerging economies are influenced not only by tax considerations but also by administrative complexity, regulatory requirements, access to finance, and the prevalence of informal economic activity. Consequently, variations in the top PIT rate may not lead to substantial changes in reported corporate taxable income, consistent with the findings of Riedl and Rocha-Akis (2009).

Overall, the insignificance of these variables suggests that the corporate tax base in Indonesia, Malaysia, Singapore, and Thailand is shaped more strongly by structural and institutional factors, such as economic growth, tax administration quality, and regional tax competition, than by individual policy parameters in isolation. Such persistence is consistent with firm-level evidence showing that tax-related accounting practices and deferred tax positions tend to adjust gradually over time, reinforcing path dependence in reported taxable income (Sumomba, 2012). This highlights the importance of considering the broader fiscal and institutional environment when evaluating the effectiveness of corporate tax policy in ASEAN countries.

## **5. CONCLUSION**

This study identifies how economic factors and tax policies influence the tax base in ASEAN countries (Indonesia, Malaysia, Singapore, and Thailand). The past tax base is found to have a significant impact on the current tax base, highlighting the importance of fiscal policy continuity. The domestic corporate tax rate does not

have a significant effect, whereas the tax rates of other countries show a positive relationship, indicating the role of tax competition among nations. Economic growth significantly expands the tax base, while other variables, such as the top personal income tax rate, labor costs, and export prices, do not show a notable impact in this model.

This study examines the relationship between corporate income tax rates and the corporate tax base in four ASEAN countries, Indonesia, Malaysia, Singapore, and Thailand, using a dynamic panel data framework estimated through Two-Stage Least Squares (2SLS). By accounting for endogeneity and persistence in the tax base, the analysis provides empirical evidence on how statutory tax rates, regional tax competition, and macroeconomic factors jointly shape corporate taxable income in the ASEAN context.

The results indicate that the statutory corporate income tax rate does not have a statistically significant effect on the corporate tax base. This finding suggests that changes in headline tax rates alone are insufficient to explain variations in corporate taxable income in ASEAN countries. One plausible explanation is that corporate tax reforms in the region are often implemented alongside tax incentives, exemptions, and administrative adjustments that offset the direct impact of statutory rate changes on the tax base. Consequently, the effectiveness of corporate tax policy cannot be assessed solely on the bases of statutory rates.

In contrast, the average corporate income tax rate of neighboring countries exhibits a statistically significant and negative relationship with the domestic corporate tax base, providing evidence of regional tax competition. This result implies that corporate taxable income in ASEAN countries is sensitive to relative tax positions within the region, consistent with theoretical predictions from tax competition models. Firms may respond to lower tax rates in neighboring countries by reallocating profits or economic activities, thereby eroding the domestic tax base even in the absence of domestic tax rate changes.

Other explanatory variables, including labor costs, export prices, and the top personal income tax rate, do not display statistically significant effects on the corporate tax base. These results suggest that the influence of such variables may be mediated by institutional and structural factors specific to ASEAN economies, such as preferential tax treatment for certain sectors, non-tax determinants of incorporation decisions, and firms' adaptive responses to cost pressures. The findings highlight that corporate taxable income in the region is shaped by a complex interaction of economic conditions and institutional arrangements rather than by individual policy parameters in isolation.

Overall, this research contributes to the study of economics by providing region-specific evidences on the determinants of the corporate tax base in ASEAN, a setting that remains under-examined in OECD economies. The findings highlight the importance of considering regional interactions and institutional context when analyzing corporate tax policies in developing and emerging economies. Future research may extend this analysis by incorporating firm-level data, alternative measures of tax incentives, or broader country coverage to further explore the channels through which tax competition and policy design influence corporate taxable income.

The empirical findings have several policy implications that are closely aligned with the results. First, given the insignificance of domestic statutory CIT rates, policies aimed solely at rate reductions or harmonization are unlikely to be effective in expanding the corporate tax base. Instead, ASEAN countries may benefit more from tax-base oriented reforms, including the rationalization of tax incentives, improved enforcement, and stronger compliance mechanisms.

Second, the presence of regional tax competition highlights the importance of greater coordination within ASEAN. Rather than full tax rate harmonization, which may be difficult to implement, ASEAN countries could explore coordination frameworks focused on transparency, minimum standards for tax incentives, and information sharing to limit harmful profit shifting. Evidences from ASEAN firms suggest that when tax incentives and holidays are not regularly evaluated, they may alter reported profits without generating sustained increases in the corporate tax base (Pitaloka & Slamet, 2025).

Third, the strong role of economic growth and tax base persistence suggests that policies supporting long-term productive capacity, such as investment in manufacturing, logistics, and digital services, can indirectly strengthen the corporate tax base. Targeted incentives should therefore be carefully designed and regularly evaluated to ensure that they contribute to sustainable taxable income rather than temporary revenue losses.

Taken together, the findings of this study suggest that corporate tax policy in ASEAN should move beyond a narrow focus on statutory rate adjustments and emphasize more on tax base-oriented reforms, regional coordination, and growth-supportive strategies. The insignificant domestic CIT rates indicates that rate reductions or harmonization alone are unlikely to expand the corporate tax base, whereas reforms targeting incentive rationalization, enforcement, and compliance may be more effective. At the same time, evidence of regional tax competition highlights the need for greater ASEAN coordination through transparency, minimum standards for tax incentives, and information sharing to mitigate harmful profit shifting without requiring full rate harmonization. The strong persistence of the tax base and the role of economic growth further imply that policies fostering long-term productive capacity, such as investments in manufacturing, logistics, and digital services, can indirectly strengthen taxable income if incentives are carefully designed and regularly evaluated. Nonetheless, these conclusions should be interpreted considering several limitations, including the reliance on aggregate measures of the tax base that do not explicitly capture evasion, avoidance, or firm-level incentives, as well as the restricted country coverage due to data constraints. As highlighted by firm-level studies, unobserved tax planning practices and incentive utilization may cause discrepancies between statutory policy parameters and reported tax outcomes, which cannot be fully captured using aggregate data (Natalia et al, 2021; Sumomba, 2012). Future research that incorporates firm-level data, explicit measures of tax incentives, broader country samples, or indicators of tax administration quality would offer a more nuanced understanding of the mechanisms through which tax policy and institutional factors shape corporate tax bases in ASEAN economies.

## REFERENCES

- Abelson, P. (2012). *Public economics: Principles and practice* (3rd ed.). McGraw-Hill Education. <https://appliedeconomics.com.au/wp-content/uploads/2021/10/public-economics-principles-and-practice-book-by-peter-abelson.pdf>
- Agustina, N. Z., & Hartono, D. (2022). Dampak perubahan tarif pajak penghasilan badan dan pajak pertambahan nilai di Indonesia. *EKUITAS (Jurnal Ekonomi dan Keuangan)*, 6(4), 456–475. <https://doi.org/10.24034/j25485024.v2022.v6.i4.5359>
- Basri, M. C., Felix, M., Hanna, R., & Olken, B. A. (2019). *Tax administration vs. tax rates: Evidence from corporate taxation in Indonesia* (NBER Working Paper No. 26150). National Bureau of Economic Research. <https://doi.org/10.3386/w26150>
- Benitez, J. C., Mansour, M., Pecho, M., & Vellutini, C. (2023, September). *Building tax capacity in developing countries* (IMF Staff Discussion Note No. 2023/006). International Monetary Fund. <https://www.imf.org/-/media/Files/Publications/SDN/2023/English/SDNEA2023006>
- Brauner, Y., & Stewart, M. (2013). Introduction: Tax, law and development. In Y. Brauner & M. Stewart (Eds.), *Tax, law and development* (pp. 3–22). Edward Elgar. <https://ssrn.com/abstract=2208161>
- Buettner, T. (2003). Tax base effects and fiscal externalities of local capital taxation: Evidence from a panel of German jurisdictions. *Journal of Urban Economics*, 54(1), 110–128. [https://doi.org/10.1016/S0094-1190\(03\)00039-1](https://doi.org/10.1016/S0094-1190(03)00039-1)
- Cai, H., & Liu, Q. (2009). Competition and corporate tax avoidance: Evidence from Chinese industrial firms. *The Economic Journal*, 119(537), 764–795. <https://doi.org/10.1111/j.1468-0297.2009.02217.x>
- Clausing, K. A. (2016). The effect of profit shifting on the corporate tax base in the United States and beyond. *National Tax Journal*, 69(4), 905–934. <https://doi.org/10.17310/ntj.2016.4.09>
- Dahlby, B., & Ferede, E. (2012). The effects of tax rate changes on tax bases and the marginal cost of public funds for Canadian provincial governments. *International Tax and Public Finance*, 19(6), 844–883. <https://doi.org/10.1007/s10797-012-9210-7>
- de Mooij, R. A., & Nicodème, G. (2008). Corporate tax policy and incorporation in the EU. *International Tax and Public Finance*, 15(4), 478–498. <https://doi.org/10.1007/s10797-008-9072-1>
- Devereux, M. P. (2007). *Developments in the taxation of corporate profit in the OECD since 1965: Rates, bases and revenues* (Working Paper No. 07/04). Oxford University Centre for Business Taxation.
- Devereux, M. P., Liu, L., & Loretz, S. (2014). The elasticity of corporate taxable income: New evidence from UK tax records. *American Economic Journal: Economic Policy*, 6(2), 19–53. <https://doi.org/10.1257/pol.6.2.19>

- Dharmapala, D. (2008). What problems and opportunities are created by tax havens? *Oxford Review of Economic Policy*, 24(4), 661–679. <https://doi.org/10.1093/oxrep/grn031>
- Feldstein, M. (1995). *Behavioral responses to tax rates: Evidence from TRA86* (NBER Working Paper No. 5000). National Bureau of Economic Research. <https://doi.org/10.3386/w5000>
- Fossen, F. M., & Steiner, V. (2018). The tax-rate elasticity of local business profits. *German Economic Review*, 19(2), 162–189. <https://doi.org/10.1111/geer.12123>
- Gordon, R. H., & MacKie-Mason, J. K. (1995). Why is there corporate taxation in a small open economy? The role of transfer pricing and income shifting. In M. Feldstein, J. R. Hines Jr., & R. G. Hubbard (Eds.), *The effects of taxation on multinational corporations* (pp. 67–94). University of Chicago Press. <https://doi.org/10.7208/9780226241876-005>
- Gordon, R. H., MacKie-Mason, J. K., & Hubbard, R. G. (1995). The importance of income shifting to the design and analysis of tax policy. In M. Feldstein, J. R. Hines Jr., & R. G. Hubbard (Eds.), *Taxing multinational corporations* (pp. 29–38). University of Chicago Press. <https://www.nber.org/books-and-chapters/taxing-multinational-corporations/importance-income-shifting-design-and-analysis-tax-policy>
- Gruber, J. (2016). *Public finance and public policy* (5th ed.). Worth Publishers.
- Guritno, M. (1999). *Ekonomi publik* (3rd ed.). BPFY-Yogyakarta.
- Hidayat, A. (2014). Analisis dampak perubahan tarif pajak penghasilan di Indonesia. *Jurnal BPPK: Badan Pendidikan dan Pelatihan Keuangan*, 7(1), 1–18. <https://jurnalbppk.kemenkeu.go.id/jurnalbppk/article/view/83>
- Hyman, D. N. (2010). *Public finance: A contemporary application of theory to policy* (10th ed.). South-Western Cengage Learning.
- International Monetary Fund. (2024). *World economic outlook database, October 2024 edition* [Data set]. <https://www.imf.org/en/Publications/WEO/weo-database/2024/October>
- James, S., & Nobes, C. (1992). *The economics of taxation* (4th ed.). Prentice Hall.
- Janeba, E., & Smart, M. (2003). Is targeted tax competition less harmful than its remedies? *International Tax and Public Finance*, 10(3), 259–280. <https://doi.org/10.1023/A:1023887530597>
- Karpowicz, A., & Majewska, E. (2018). Corporate income tax revenue determinants: How important is the tax rate? In M. B. Beros, N. Reckler, & M. Kozina (Eds.), *Economic and Social Development: Book of Proceedings* (pp. 361–369). Varazdin Development and Entrepreneurship Agency. <https://www.proquest.com/conference-papers-proceedings/corporate-income-tax-revenue-determinants-how/docview/2057944111/se-2?accountid=49069>
- Kawano, L., & Slemrod, J. (2016). How do corporate tax bases change when corporate tax rates change? With implications for the tax rate elasticity of

- corporate tax revenues. *International Tax and Public Finance*, 23, 401–433. <https://doi.org/10.1007/s10797-015-9375-y>
- Krapf, M., & Staubli, D. (2025). Regional variations in corporate tax responsiveness: Evidence from Switzerland. *European Economic Review*, 171, 104891. <https://doi.org/10.1016/j.euroecorev.2024.104891>
- Laffer, A. B. (2004). *The Laffer curve: Past, present, and future* (Executive Summary No. 1765). The Heritage Foundation. <https://www.heritage.org/taxes/report/the-laffer-curve-past-present-and-future>
- Mankiw, N. G. (2010). *Macroeconomics* (7th ed.). Worth Publishers.
- Mankiw, N. G. (2013). *Principles of microeconomics* (7th ed.). Cengage Learning.
- Matsumoto, M. (2022). Tax competition and tax base equalization in the presence of multiple tax instruments. *International Tax and Public Finance*, 29(5), 1213–1226. <https://doi.org/10.1007/s10797-021-09703-z>
- Meita, I., & Nurdiniah, D. (2023). The effect of changes in corporate income tax rates, inflation and interest rates on income tax revenues. *Jurnal Pajak dan Keuangan Negara (PKN)*, 4(2), 563–570. <https://doi.org/10.31092/jpkn.v4i2.2033>
- Mintz, J. M. (2022). The global corporate minimum tax: A cure or not? *Canadian Tax Journal / Revue fiscale canadienne*, 70(Supplement), 231–255. <https://doi.org/10.32721/cj.2022.70.suppl.mintz>
- Musgrave, R. A., & Musgrave, P. B. (1989). *Public finance in theory and practice* (5th ed.). McGraw-Hill.
- Natalia, M., Carolina, V., & Joni, J. (2021). Relationship between corporate social responsibility disclosure, corporate governance, and tax avoidance. *KINERJA*, 25(1), 79–90. <https://doi.org/10.24002/kinerja.v25i1.4198>
- Nguyen, J. H. (2022). How do labor adjustment costs affect corporate tax planning? Evidence from labor skills. *International Review of Financial Analysis*, 83, 102293. <https://doi.org/10.1016/j.irfa.2022.102293>
- Organisation for Economic Co-operation and Development. (2024). *Revenue statistics in Asia and the Pacific 2024: Tax revenue buoyancy in Asia*. <https://doi.org/10.1787/e4681bfa-en>
- Pindyck, R. S., & Rubinfeld, D. L. (2018). *Microeconomics* (9th ed.). Pearson Education.
- PwC. (2018, May 30). *Singapore - Corporate - Tax credits and incentives*. PwC Worldwide Tax Summaries. <https://taxsummaries.pwc.com/singapore/corporate/tax-credits-and-incentives>
- Pitaloka, R. B., & Slamet, K. (2025). CIT rate and tax holiday as tax competition tools to attract inward FDI in ASEAN-6. *KINERJA*, 29(2), 164–188. <https://doi.org/10.24002/kinerja.v29i2.10723>
- Ramsey, F. P. (1927). A contribution to the theory of taxation. *The Economic Journal*, 37(145), 47–61. <https://doi.org/10.2307/2222721>

- Rasji, R., Liane, W. S., & Nainggolan, D. H. (2023). Analisis pengaruh perubahan penurunan tarif pajak penghasilan (PPh) wajib pajak badan terhadap pendapatan negara. *NUSANTARA: Jurnal Ilmu Pengetahuan Sosial*, 10(5), 2323–2332. <https://jurnal.um-tapsel.ac.id/index.php/nusantara/article/view/11626>
- Riedl, A., & Rocha-Akis, S. (2009). *Testing the tax competition theory: How elastic are national tax bases in OECD countries?* (CESifo Working Paper No. 2669). <https://doi.org/10.2139/ssrn.1423748>
- Stiglitz, J. E. (1999). *Economics of the public sector* (3rd ed.). W. W. Norton & Company.
- Sumomba, C. R., & Hutomo, Y. S. (2012). Pengaruh beban pajak tangguhan dan perencanaan pajak terhadap manajemen laba. *KINERJA*, 16(2), 103–115. <https://doi.org/10.24002/kinerja.v16i2.361>
- Tax Foundation (2023, December 12). *Corporate tax rates around the world, 2023*. <https://taxfoundation.org/data/all/global/corporate-tax-rates-by-country-2023/>
- Thomas, K. D. (2017). User-friendly taxpaying. *Indiana Law Journal*, 92(4), 1509–1558. <https://www.repository.law.indiana.edu/ilj/vol92/iss4/5/>
- Tobing, G. C., & Mukarromah, A. (2015, June). Pajak dalam kompetisi merebut investasi. *InsideTax*, 32, 6–15. <https://ddtc.co.id/uploads/pdf/InsideTax-32nd-Edition.pdf>
- Wooldridge, J. M. (2013). *Introductory econometrics: A modern approach* (5th ed.). Cengage Learning.
- World Bank. (2020). *Doing business 2020: Comparing business regulation in 190 economies*. <https://doi.org/10.1596/978-1-4648-1440-2>