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Analysis of the Linkages between Foreign Investment, Trade, and Economic Structure on Tax Revenue in Asia

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Abstract
Tax revenue is the main source of funding in various countries, including countries in Asia. However, in the Asian context, there are still some serious problems related to tax revenue, such as tax ratio problems and tax evasion. This study identifies the determinants of tax revenue in Asia over the period 2008-2023. We use the Generalized Method of Moments (GMM) model to analyze the results and find that foreign investment inflows and per capita GDP increase are the main sources of tax revenue increase compared to agriculture, manufacturing, and trade. For this reason, the government is expected to review the tax policies that have been issued to achieve a balance in state tax revenue.

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1. INTRODUCTION

Tax and non-tax revenues are the main sources of government income from economic activities. In recent years, privatization has resulted in a decline in the proportion of the public sector in the economy in most countries around the world. Because of this, tax revenue has become a vital sector to be able to pay for key public services (Raouf, 2022). This has resulted in governments relying heavily on tax revenue sources as the main means of funding by imposing fees on citizens and corporate entities. In the long run, they try to control the gap between income and taxation levels (Nguyen-Phuong et al., 2022).

For countries in Asia, tax revenue is the main source of state revenue to support economic development and public welfare. However, various challenges still hinder the optimization of tax revenue in the region. One of the main problems is the low tax-to-GDP ratio in many Asian countries, especially in developing countries. According to a report by the Organization for Economic Cooperation and Development (OECD), several countries in Asia have lower tax revenue levels than other regions such as Europe and Latin America. This indicates that there is untapped tax potential (OECD, 2024).

Economic factors such as Foreign Direct Investment (FDI), Trade Openness, Agriculture, Manufacture, and GDP per capita are believed to play an important role in determining a country's tax revenue (Camara, 2023; Chamisa and Sunde, 2024; Chettri et al., 2023; Garg et al., 2024; Mallick, 2021; Neog and Gaur, 2021; Nguyen and Duong, 2022; Rahman and Islam, 2023). FDI can broaden the tax base by encouraging business sector growth and job creation, but tax incentives given to foreign investors can also reduce potential state revenue (Gaspareniene et al., 2022). Trade Openness, which reflects a country's

openness to international trade, can have a dual impact on tax revenue. On the one hand, it increases revenue through import duties and trade taxes, but on the other hand, it can reduce import tax rates due to trade liberalization policies (Gaalya et al., 2017).

In addition, a country's economic structure, such as the contribution of the agriculture and manufacturing sectors, also affects tax revenue. Countries with a large share of the agricultural sector often face challenges in collecting taxes effectively due to the large number of informal economic activities and the difficulty of implementing tax policies in this sector (Arezki et al., 2021). In contrast, a growing manufacturing sector can contribute more to taxes through corporate tax and value-added tax (VAT) (Minh Ha et al., 2022). On the other hand, GDP per capita is also an important indicator in understanding tax capacity, where countries with higher per capita income tend to have more efficient tax systems and better tax compliance rates (Gaalya et al., 2017).

In the Asian context, some specific challenges that are interesting to study include Tax Evasion and Tax Avoidance, Effectiveness of Tax Incentives, Impact of Free Trade on Trade Taxes, and Taxes in the Informal Sector. This study aims to analyze how FDI, Trade Openness, Agriculture, Manufacture, and GDP per capita affect tax revenue in Asian countries over the period 2008-2023. By understanding the relationship between these variables, this study is expected to provide recommendations for policy makers in increasing tax revenue effectively and sustainably.

2. LITERATURE REVIEW

2.1.Theoretical Foundations

To be able to understand and learn related to tax revenue, there are at least three theories that can explain tax revenue, including service cost theory, benefit theory, and socio-political theory related to taxation (Minh Ha et al., 2022). Service cost theory states that government expenditures to provide certain services to society should be charged to individuals or groups that directly benefit from these services (Jhingan, 1993).

The theory received several criticisms so that the theory has undergone modernization because there are several obstacles inherent in the theory, the modernization has led to the theory of taxation benefits which states that people are required to pay taxes in proportion to the benefits they get from government services. This concept illustrates the existence of a reciprocal relationship between taxpayers and the government, where the government provides various social goods funded by taxes paid by the public. However, as the benefits individuals receive from government services are difficult to measure accurately, this theory is no longer considered relevant (Minh Ha et al., 2022).

Based on the socio-political philosophy of taxation, the main aspects to consider in tax policy are social and political objectives. This argument asserts that the tax system should not be focused on benefiting individuals, but rather designed to solve problems faced by society at large (Ojong et al., 2016).

2.2.Empirical Studies

Tax is one of the sources of revenue that accounts for a large portion of the country's income, especially in middle-income countries. The study of taxation is an interesting topic for many academics. Previous researchers have provided many research results in various countries using various methods.

Apeti & Edoh, (2023) conducted a study related to the performance of tax revenues in 104 developing countries during the period 1990-2019 using the entopy balancing method. The results show that the increase in tax revenue is influenced by the use of mobile money, personal and corporate income taxes, taxes on goods and services, and the quality and ease of paying taxes.

Studies related to tax revenue in the European Union economy during 1999-2019 using systematic and comparative analysis methods conducted by Gaspareniene et al., (2022) The results of the analysis show that outward FDI investment has a significant stimulative effect on total tax revenue. In contrast, inward FDI tends to depress tax revenue. Studies on the lagging effect of FDI on tax revenue in EU countries reveal that outward FDI made two years earlier has a statistically significant lagged impact. Estimates suggest that this effect acts as an incentive. Meanwhile, no statistical evidence was found to suggest a delayed effect of inward FDI flows on tax revenue.

Mallick, (2021) has conducted research related to tax revenue in the country of India from 1990-2018 which discusses the role of institutions/governance and utilization of modern ICT infrastructure in increasing tax revenue for the combined government. Surprisingly, the results showed that ICT infrastructure and governance quality did not have a significant positive impact on total tax revenue.

On the other hand, Garg et al., (2024) conducted a study using the ARDL approach related to state tax revenue in India during the period 1991-2022 and found that open trade, life expectancy, manufacturing sector contribution to value added, and GDP per capita had a positive effect on government tax effort in conventional determinants. Likewise, in terms of economic policy, financial deepening has a favorable impact. In contrast, inflation boosts tax effort in the short run, but weakens it in the long run. Meanwhile, under institutional factors, official development assistance also has a positive impact.

Mapunda et al., (2023) analyzed the impact of the expansion of the service sector on tax revenue in Tanzania using the ARDL method during the period 1970-2018. This study reveals that the development of the service sector has a positive impact on tax revenue. More specifically, the government services sector and the trade services sector were shown to have a positive and significant effect on tax revenue in Tanzania. Meanwhile, the business services, transportation, and personal services sectors do not show a significant impact. This study enriches the literature on services and tax revenue by providing evidence that services sector growth has the potential to affect tax revenue.

Afolabi et al., (2024) conducted research related to tax revenue and stated that illicit financial flows have increased and have a detrimental impact on tax revenue in Resource-Rich African Countries. This is contrary to sustainable development.

Desta, (2022) analyzed the impact of institutional quality (political stability, corruption, government effectiveness, rule of law, voice and accountability, and regulatory quality) on tax revenue collection in Ethiopia over the period 1996-2020 using the ARDL method. The results state that rule of law, government effectiveness, and political stability have a positive and significant impact on Ethiopia's tax revenue collection in both the short and long run. However, only voice and accountability have a significant positive relationship in the long run. In addition, in both the short and long run, corruption and quality of order have a significant negative impact on tax revenue collection.

Based on the literature review, there are several research gaps that this study can fill. In terms of geographical context, previous studies have focused on regions other than Asia. This study fills the gap by examining the factors that affect tax revenue specifically in Asian countries. This study combines FDI, Trade Openness, Agriculture, Manufacturing, and GDP per Capita in

one model, which has not been comprehensively explored. In addition, the impact of Agriculture and Manufacturing sectors on tax revenue in Asia has rarely been discussed in previous studies.

In terms of research methods, this study has the potential to contribute by using a more sophisticated econometric approach, such as the Generalized Method of Moment, which has not been widely applied in previous studies. Thus, this study not only fills the gap in the literature but also provides important insights for tax policy in Asia.

2.3.Hypothesis

Development Foreign Direct Investment

Foreign Direct Investment (FDI) inflows can expand the tax revenue base through the entry of new companies into the host country. The influx of FDI through multinational companies will generate profits through increased production and employment in the host country which will then be taxed, either in the form of corporate income tax, value-added tax, or labor tax (Camara, 2023; Chettri et al., 2023; Gnangnon, 2021; Nguyen-Phuong et al., 2022). However, some countries often provide tax incentives to attract investors. This allows FDI to have a negative impact on the country's tax revenue (Nguyen and Duong, 2022).

The mixed impact of FDI on tax revenue depends on the economic conditions and policies provided by the home government. Therefore, we hypothesize that foreign direct investment has a positive relationship with tax revenue.

Trade Openness

Trade openness can increase tax revenue through increased trade activity that broadens the base of indirect taxes such as import taxes and customs duties (Gnangnon and Brun, 2019; Neog and Gaur, 2021; Rahman and Islam, 2023). However, excessive trade liberalization may reduce import tariffs, thereby reducing revenue from trade taxes (Cagé and Gadenne, 2018).

Therefore, we expect trade openness to have a positive impact on tax revenue.

Agriculture

The agriculture sector generally has a lower tax contribution than other sectors because many countries apply tax incentives or subsidies to this sector. In addition, the dominance of small and informal businesses in agriculture may limit tax collection capacity (Minh Ha et al., 2022).

Therefore, the hypothesis proposed is that the increase in agriculture value added tends to have a negative relationship with tax revenue.

Manufacture

A growing manufacturing sector can increase tax revenue through corporate tax, labor tax, and value-added tax (VAT). The growth of the manufacturing industry also contributes to increased domestic investment and consumption, which further expands the tax base (Gupta, 2007; Minh Ha et al., 2022). Therefore, we expect manufacturing to have a positive impact on tax revenue.

Gross Domestic Product

GDP per capita growth reflects an increase in people's income and purchasing power, which can increase tax revenue from both income tax and consumption tax. However, the effect may vary depending on tax policy and the level of tax compliance (Anastasiou et al., 2024; Apeti and Edoh, 2023; Piancastelli and Thirlwall, 2020). Thus, we assume that GDP per capita has a positive relationship with tax revenue.

3. RESEARCH METHODS

This study combines time series data with cross-sectional data, or what is commonly called panel data for 16 years from 2008-2023. The case studies in this study include Asian countries with a sample of 24 countries. The sample selection refers to countries with complete data on each variable during the study period. The data in this study is classified as secondary data with data retrieval through the World Bank, Transparency International, and Asian Development Bank (ADB) websites.

This study uses the Generalized Method of Moments (GMM) approach developed by Arellano & Bond (1991) to analyze the data in order to overcome the potential endogeneity of explanatory factors because GMM is considered more efficient in overcoming autocorrelation and heteroscedasticity (Wooldridge, 2001). The GMM estimation model consists of first difference (FD-GMM) and system difference (Sys-GMM) where each estimation model consists of one-step and two-step models. This study focuses on the two-step model because this model is considered more efficient and robust standard errors to heteroscedasticity and autocorrelation (Roodman, 2009).

To test the best model between FD-GMM and Sys-GMM, we conducted several tests, such as testing for variable partiality using Pooled OLS and fixed effects estimators as benchmarks. Pooled OLS estimation of the dynamic panel model results in an upward bias in the lagged dependent variable coefficients. In contrast, the fixed effects estimator produces a downward bias. This suggests that a consistent estimate should be somewhere in between (Ibrahim and Arundina, 2022).

To test the validity of the instruments used and their over-identification, this study uses the Sargan (1958) test, while to test for serial correlation, we use the Arellano-Bond test. Thus, the model can be defined as Equation (1) below:

$$TRit = \beta 0 + \beta 1 TRit{-}1 + \beta 2 FDIit + \beta 3 TOit + \beta 4 AVAit + \beta 5 MVAit + \beta 6 GDPCit + \beta 7 INFLit + \beta 8 CPIit + \varepsilon it \quad (1)$$

where TRit is tax revenue; TRit-1 is the first lag value of tax revenue; FDIit is foreign direct investment inflows; TOit is trade openness; AVAit is agricultural value added; MVAit is manufacturing value added; GDPCit is gross domestic product growth per capita; INFLit is inflation; CPIit is corruption perceptions index; Ɛ is an error term; i represents country; and t represents year.

In this study, we add control variables to see a more accurate impact of the independent variables. The control variables that we include in the study are Inflation and Corruption Perceptions Index. To understand more about each variable used in this study, we summarize in table 1 below:

Table 1. Variable Definitions and Measures

Variable	Definition	Type	Source

Tax Revenue	Revenue collected by the government through taxation is obtained from various sources, such as individuals, public companies, trade, royalties on natural resources, and/or foreign aid.	% of GDP	Asian Development Bank (ADB)
Foreign Direct Investment, net inflow	The value of direct investment into a country from non-resident investors	% of GDP	Asian Development Bank (ADB)
Trade Openness	The degree of openness of a country to international trade as measured by the ratio of exports and imports to GDP	% of GDP	World Bank
Agriculture Value Added	The net output of the agricultural sector after summing all outputs and subtracting intermediate inputs.	% of GDP	World Bank
Manufacturing Value Added	Net output of the manufacturing sector after summing all outputs and subtracting intermediate inputs.	% of GDP	World Bank
Gross Domestic Product per Capita, growth	The annual growth rate of GDP per capita calculated as the percentage change in GDP per capita between two consecutive years.	Annual %	World Bank
Inflation	The general increase in prices of goods and services over time as measured by the Consumer Price	Annual %	World Bank
Corruption Perceptions Index	Measurement of a country's level of corruption Score Transparency International	Score	Transparency International

Source: Author, processed 2025

4. RESULTS AND DISCUSSION

4.1.Descriptive Statistics

From the descriptive statistics shown in table 2, it can be seen that the data has quite informative distribution characteristics.

Table 2. Descriptive Statistics

Variable	Obs	Mean	Std. dev.	Min	Max
TR	384	16.63223	5.979386	6.759212	34.3

FDI	384	5.701274	8.826723	-29.26173	58.52019
TO	384	101.8618	88.79822	24.39017	442.62
AVA	384	11.85633	8.413113	.0265268	35.04359
MVA	384	14.49044	7.617795	.9126655	32.11941
GDPC	384	2.996965	3.747299	-13.50884	15.28304
INFL	384	5.053908	4.589451	-1.403608	30.76813
CPI	384	35.58646	25.19176	1.8	91

Source: Author, processed 2025

From the data on the average value and standard deviation in table 2 above, it shows that the data varies greatly on the FDI and GDPC variables, this can be seen from the standard deviation value which is greater than the average value of these variables. TR has a minimum value of 6.759212 in India in 2019 and a maximum value of 34.3 in New Zealand in 2022. The FDI variable has a minimum value of -29.26173 in Mongolia in 2016 and a maximum value of 58.52019 in Hong Kong in 2015. The TO variable has a minimum value of 24.39017 in Japan in 2009 and a maximum value of 442.62 in Hong Kong in 2013. The AVA variable has a minimum value of 0.0265268 in Singapore in 2022 and a maximum value of 35.04359 in Solomon Islands in 2021. The MVA variable has a minimum value of 0.9126655 in Hong Kong in 2021 and a maximum value of 32.11941 in China in 2008. The GDPC variable has a minimum value of -13.50884 in Armenia in 2009 and a maximum value of 15.28304 in Mongolia in 2011. The INFL variable has a minimum value of -1.403608 in Armenia in 2016 and a maximum value of 30.76813 in Pakistan in 2023. The CPI variable has a minimum value of 1.8 in Cambodia and Kyrgyz Republic in 2008 and a maximum value of 91 in New Zealand in 2013-2015 respectively.

4.2. Regression Model Results

In this study, we add the estimated value of the first lag of the TR variable to the OLS and FE regression models to see the bias of the GMM estimation results that will be used in this study. The OLS estimation benchmarks the upper bias on the lagged dependent variable coefficient. In contrast, the fixed effects estimator becomes the benchmark for downward bias. This suggests that a consistent estimate of the GMM model should fall somewhere in between (Ibrahim and Arundina, 2022).

Table 3 reports that the first lag coefficient of the TR variable from the GMM estimation finds that the Sys-GMM estimation model is a constant estimate, because it has a first lag coefficient value that is between FE and OLS. Meanwhile, the estimation results from FD-GMM show a downward bias.

Furthermore, we conducted the Sargan and Arellano-Bond tests as shown by the AR(1) and AR(2) values in Table 3. The results show that both estimation models of GMM (FD-GMM and Sys-GMM) are valid estimates. So that in this study, the selected model is Sys-GMM considering that the model is a constant and valid model.

Table 3. Regression Model

Variable	OLS	FE	FD-GMM	Sys-GMM

TRit-1	0.9746***	0.6736***	0.4946***	0.7688***
	(0.000)	(0.000)	(0.000)	(0.0000)
FDIit	0.0081	0.0239	0.0197**	0.0157**
	(0.555)	(0.105)	(0.001)	(0.004)
TOit	-0.0011	0.0189***	0.0275***	0.0104
	(0.428)	(0.000)	(0.000)	(0.086)
AVAit	0.0052	-0.1226**	-0.0978	-0.0210
	(0.596)	(0.001)	(0.151)	(0.804)
MVAit	-0.0229*	-0.0944	-0.1497	-0.0486
	(0.034)	(0.051)	(0.146)	(0.552)
GDPCit	0.0812***	0.0633**	0.0313*	0.0612***
	(0.000)	(0.001)	(0.026)	(0.000)
INFLit	-0.0037	0.0259	0.0064	0.0500***
	(0.854)	(0.233)	(0.396)	(0.000)
CPIit	0.0053	0.0043	0.0042*	0.0085***
	(0.116)	(0.233)	(0.041)	(0.000)
Cons	0.3895	5.7421	8.4816	2.8375
AR(1)	-	-	-3.0842*	-2.8916*
			(0.0020)	(0.0038)
AR(2)	-	-	-0.2827	0.0891
			(0.7773)	(0.9290)
Sargan	-	-	18.1144	17.4037
			(1.0000)	(1.0000)
Obs.	360	360	336	360

Notes: * p<0.05, ** p<0.01, *** p<0.001
Source: author, processed 2025

Based on the estimation results of the Sys-GMM model in table 3, we find the statistical result that the first lag (TRit-1) shows a positive sign and is significant at the 1% level, so that a 1% increase in TR in the previous time will lead to an increase of 0.76% in TR in the next time. The FDI variable shows a positive significant result on TR. All things being equal, a 1% increase in FDI will increase TR by 0.01%. TO, AVA, and MVA variables show insignificant results on TR. GDPC variable shows a positive significant result on TR. All things being equal, a 1% increase in GDPC will increase TR by 0.06%. INFL variable shows a positive significant result on TR. If all things are equal, a 1% increase in INFL will increase TR by 0.05%. The CPI variable shows a positive significant result on TR. If all things are equal, a 1% increase in CPI will increase TR by 0.008%.

4.3.Discussion

Foreign Direct Investment on Tax Revenue

Foreign Direct Investment (FDI) has been an important catalyst in changing the fiscal dynamics in various Asian countries through its profound positive impact on tax revenue. With the influx of foreign capital, Asian countries have witnessed not only structural shifts in the economy, but also

the creation of a broader and more diverse tax base. FDI boosts industrial and service activities, which indirectly creates jobs and increases domestic income (Andrejovská and Puliková, 2018; Gaspareniene et al., 2022; Gobachew, 2017). This has spurred fiscal policy reforms, including improvements in the tax administration system and strengthening of the regulatory framework to ensure greater transparency and tax compliance. This transformation is seen through the integration of advanced technology in tax reporting and monitoring processes, thereby reducing tax evasion loopholes (Chamisa and Sunde, 2024).

In addition, FDI often promotes the transfer of knowledge and modern managerial practices that improve the operational efficiency of firms, thereby enlarging the tax base through increased profitability. The involvement of foreign investors also generates healthy competition in the domestic market, forcing local firms to increase productivity and innovation, which in turn contributes to improved tax revenues (Faeth, 2010; Gobachew, 2017). This impact is not only limited to income tax, but also includes indirect taxes such as VAT and import duties, due to increased international trade activities (Gaspareniene et al., 2022).

Overall, the presence of FDI in Asia acts as a driver of structural reforms in fiscal policy, strengthening economic foundations through increased productivity and administrative efficiency (Morrissey et al., 2016), as well as opening up opportunities for governments to allocate greater resources to infrastructure development and sustainable public services (Cung, 2019).

This result supports research from Camara (2023) and Minh Ha et al., (2022) which state that FDI inflows have an important role in increasing tax revenue in the host country.

Trade Openness on Tax Revenue

In the Asian context, although classical economic theory suggests that increased trade openness should expand the tax base through the expansion of economic activity, empirical reality shows that trade openness is not always directly proportional to the increase in tax revenue.

This is due to several complex interrelated factors. First, the heterogeneous economic structure of various Asian countries often makes it difficult to homogenize tax policies; countries with a dominance of the informal sector or industries that depend on fiscal incentives tend to experience obstacles in maximizing tax revenue despite an increase in trade. Second, the existence of fiscal policies that deliberately lower tax rates to attract foreign investment can also reduce potential tax revenue (Arezki et al., 2021; IMF African Dept., 2024; Ma, 2020).

In addition, tax avoidance practices and transfer pricing manipulation by multinational companies active in cross-border trade weaken the direct link between open trade and national tax bases (Arezki et al., 2021). Bureaucratic factors and the government's inability to effectively adapt the tax system to the rapid dynamics of the global market also play an important role in reducing the positive impact (Salah Eddine et al., 2021).

Thus, while trade openness has the potential to boost economic growth, tax revenue in Asia does not automatically increase significantly without fiscal policy reforms and improved tax administration capabilities to adapt to the challenges of globalization.

This result is in line with research from Chamisa & Sunde, (2024) which states that trade openness has no significant impact on tax revenue.

Agriculture on Tax Revenue

Although the agricultural sector is a vital component in the economic structure of many countries in Asia, various empirical analyses indicate that an increase in Agriculture Value Added does not significantly contribute to tax revenue.

This can be explained through several structural aspects and prevailing fiscal policies. First, the often decentralized and informal nature of agricultural production makes tax collection difficult, as existing tax administration systems tend to be more optimal for formal sectors such as industry and services (Chamisa and Sunde, 2024; Morrissey et al., 2016). In addition, many countries in Asia provide various forms of subsidies and incentives to the agricultural sector to maintain food price stability and farmers' welfare, which indirectly reduces the potential tax revenue from this sector (Gupta, 2007). Fiscal policies designed to diversify state revenue sources also tend to shift the focus to sectors with faster economic growth and a broader tax base, marginalizing the contribution of the agricultural sector (Chamisa and Sunde, 2024; Rodríguez, 2018).

Thus, although Agriculture Value Added may increase along with modernization and productivity improvements, its direct impact on tax revenue is minimal due to limitations in the tax collection system and fiscal policies that prioritize other sectors that are considered to have higher revenue potential (Rodríguez, 2018).

This result corroborates the research of Morrissey et al., (2016) which states that the agriculture sector has no consistency in terms of its influence on tax revenue.

Manufaktur on Tax Revenue

The analysis shows that the insignificant relationship between manufacturing value added and tax revenue in Asia during the study period is influenced by various structural factors and fiscal policy dynamics that vary across countries. Although the manufacturing sector plays an important role in economic growth, the conversion of industrial output into tax revenue is often hampered by fiscal incentives, tax holidays, and tariff reduction policies implemented to attract foreign investment, so that value-added growth does not directly reflect an increase in the tax base (Morrissey et al., 2016; Piancastelli and Thirlwall, 2020).

In addition, heterogeneity in the level of taxpayer compliance, the quality of tax administration, and collection mechanisms in each Asian country also reduced the effectiveness of tax collection from the manufacturing sector (Tandean and Winnie, 2016). The structural transformation of economies that took place during the period, where several countries shifted towards service- and technology-based economies, also reduced the proportion of tax revenue attributable exclusively to manufacturing. Equally important, the influence of external dynamics such as global market fluctuations, financial crises, and trade wars complicated the relationship, as these factors generated economic uncertainty that obscured the signal of manufacturing's direct value-added contribution to tax revenue (Morrissey et al., 2016).

Overall, although the manufacturing sector remains an important pillar in the economy, its direct impact on tax revenue has become insignificant due to the complex interaction between fiscal policy, economic structure, and changing external conditions.

This result is in line with research conducted by Chaudhry & Munir, (2010) which states that the manufacturing sector has no influence on tax revenue, if the proportion of the manufacturing sector is very small from the country's GDP.

Gross Domestic Product on Tax Revenue

Increasing GDP per capita in Asia has a positive impact on tax revenue, both in terms of state fiscal capacity and taxpayer compliance. Along with economic growth and increasing per capita income, people's purchasing power tends to rise, which then has an impact on increasing consumption and investment (Juliannisa et al., 2023; Neog and Gaur, 2021). This directly contributes to the increase in tax revenue, especially value-added tax (VAT) and income tax (Gaalya et al.,

2017). In addition, countries with higher GDP per capita generally have a more formalized economic structure, so more business entities and individuals enter the tax system, increasing tax compliance and broadening the tax base (Kiang et al., 2021; Mengistie, 2018; Minh Ha et al., 2022).

In many Asian countries experiencing rapid economic growth such as China, India, and Indonesia, the increase in GDP per capita has also contributed to more effective tax reforms. The government can allocate more resources to improve the tax administration system, strengthen regulations, and utilize digitalization to reduce tax evasion and increase transparency (Raouf, 2022). In addition, as per capita income increases, people tend to be more aware of the importance of taxes in economic development, which may increase voluntary tax compliance.

However, although the correlation between GDP per capita and tax revenue tends to be positive, the effect may vary depending on the tax structure, fiscal policy, as well as the level of economic inequality in each country. Some countries with weak tax systems or high informal sectors may not experience an increase in tax revenue proportional to GDP per capita growth. Therefore, for this positive impact to be optimized, a policy that balances economic growth, investment incentives, and tax base expansion is needed that is fair and sustainable (Mengistie, 2018; Minh Ha et al., 2022).

Therefore, this study supports the research results of Chettri et al. (2023) and Minh Ha et al., (2022) which state that an increase in GDP per capita in a country can encourage an increase in tax revenue.

5. CONCLUSIONS AND IMPLICATIONS

5.1.Conclutions

Based on the analysis conducted, it can be concluded that various economic factors have a diverse influence on tax revenue in Asian countries. Foreign Direct Investment (FDI) is proven to have a positive impact by broadening the tax base and improving the efficiency of tax administration. However, trade openness does not always have a direct impact on tax revenue due to fiscal incentives and tax avoidance practices by multinational companies. The agriculture sector also shows limited contribution to tax revenue due to its informal nature and various fiscal incentives. Meanwhile, while manufacturing plays an important role in the economy, incentive policies and tax holidays hinder its contribution to taxes. In contrast, growth in Gross Domestic Product (GDP) per capita has consistently had a positive relationship with tax revenue, due to increased purchasing power, tax compliance, and effectiveness of tax administration in countries with rapidly growing economies.

5.2.Implications

The results of this study have important implications for fiscal policy formulation in Asia. Governments need to optimize the benefits of FDI inflows by improving the transparency and effectiveness of tax administration to maximize state revenue. In addition, while trade openness can boost economic growth, it requires strengthening regulations and a more adaptive tax system to prevent tax evasion. In the agriculture and manufacturing sectors, tax policy reforms should be directed at broadening the tax base and reducing reliance on excessive fiscal incentives. Finally, given the positive relationship between GDP per capita growth and tax revenue, the government must ensure that economic growth is inclusive and accompanied by tax policies that are able to optimally capture potential revenue, so that it can be used for infrastructure development and sustainable public welfare.

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