

IDENTIFY AND ASSESS THE KEY COMPONENTS INFLUENCING LOCAL TAX RETURNS IN ASEAN COUNTRIES

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Abstract

Background: Taxes are regarded as an efficient tool for the country to regulate the macro-economy, which is primarily utilized to finance expenses, in addition to serving as the primary source of national net profit. Taxes are a significant source of income and a significant share of overall national net profit in emerging Southeast Asian (ASEAN) economies.

Aim: The current research seeks to determine the key components influencing the tax return policy in all ASEAN nations during the existing time frame to suggest policy changes and suggestions that will assist in the growth of the political and economic system as a whole as well as the optimization of the tax return structure.

Method: The research presented in this article includes panel data from ten nations from 2002 to 2020.

The World Bank's World Developing Indicators are a source of information on tax returns, level of economic development (GDP), trade, foreign direct investment (FDI), agricultural value added (ARG), industrial sector value added (IND), education level, average lifespan, and infant death ratio.

Results: *The study results illustrate that five out of the eight above components positively affect tax returns. FDI, IND, SCHTER, and INFDEATH have no statistical significance. This implies that when all other factors are held constant, the total national tax return is unaffected by foreign direct investment, the industry share in the GDP, the degree of education, or the infant death ratio.*

Conclusion: *Governments in ASEAN countries must take action to raise per capita income in order to raise tax returns. They should actively and adaptably use economic policy tools to closely and synchronously operate with financial measures.*

Keywords: *ASEAN countries, tax return, economic growth, GDP, FDI, governmental policies*

INTRODUCTION

In developing countries, the state has difficulties due to the rising requirements of its citizens and the constrained resources it has access to. This scenario is made worse by the high cost of public services, which is becoming increasingly difficult to maintain, especially in the current environment of limited mandatory levies, and the demand from the general public to maximize the use of public funds through effective public policies. The provision of public goods in this environment—one in which resources are scarce, and requirements are limitless—requires a special focus on the mobilization of various resources in order to implement a tax strategy that can raise the most funding. One of the means by which government activity affects economic prosperity is through the tax system. In fact,

taxes are the primary funding source for maintaining basic services and making long-term investments in public goods. Policy changes must be implemented to improve the interaction between the tax system and taxpayers in order to encourage their adhesion and incorporate the development of social demand into the formulation of public policies. This is necessary due to the complexity of the tax system and the problems with its governance in developing states.

Many economists see tax returns as one of the key elements influencing a nation's economic development. Economic expansion is the prolonged process by which the overall productivity of an economy is developed over time to boost the level of output and national income (Malizia et al., 2020). At the same time, recent theories have acknowledged the contribution taxes make to economic expansion. According to the classical growth theory, since economic growth is dependent on scarce resources and population increase, it

tends to slow down over time. Entrepreneurial intention, technical innovation, and human capital, including individual educational spending and employee motivation, are regularly impacted by tax returns. Therefore, steady taxes gave developing nations a secure and predictable financial environment for many years to foster growth and finance the essential economic and social structures. Tax returns, combined with economic growth, lower long-term reliance on aid and debt, assuring good governance by encouraging transparency and accountability from governments to their constituents (van der Wielen, 2020).

Taxes are a significant source of income and a significant share of overall national net profit in emerging Southeast Asian (ASEAN) economies (Barmuta et al., 2020; Blancas et al., 2014; Lafuente et al., 2019). Like most of Asia, the ASEAN economies have grown strongly during the past three decades. Meanwhile, lower-income nations like Cambodia, Lao PDR, Myanmar, and Vietnam

have expanded more quickly than their wealthier neighbors, indicating some degree of economic divergence within ASEAN. Taxes are regarded as an efficient tool for the country to regulate the macro-economy, which is primarily utilized to finance expenses, in addition to serving as the primary source of national net profit (Jose et al., 2022; Rexha et al., 2021; Tien, 2021; Tien et al., n.d., 2020). Ensuring equitable income distribution and social justice is the primary goal of the state financial plan (Bonomi Savignon et al., 2019; Dombi & Dedák, 2019; Kim & Park, 2021). As a result, it is essential to determine the key components influencing these nations' tax returns in order to suggest broad-reaching policy implications. Numerous empirical researches have been conducted around the world using a variety of methods to examine the factors impacting tax returns (Batrancea et al., 2019; Omar & Inaba, 2020; Piancastelli & Thirlwall, 2021).

Nevertheless, the majority of these studies only concentrate on one or a limited number of the region's countries since each country has unique natural characteristics and varied economic status. As a result, this approach has some limitations. Therefore, the findings of these investigations might easily result in country uniformity (Hamadamin & Atan, 2019). The current research seeks to determine the key components influencing the tax return policy in all ASEAN nations during the existing time frame in order to suggest policy changes and suggestions that will assist in the growth of the political and economic system as a whole as well as the optimization of the tax return structure.

RESEARCH METHODOLOGY

Analysis of data

The research presented in this article includes panel data from ten nations from 2002 to 2020. The list of selected countries is highlighted in table 1. The World Bank's World

Developing Indicators are a source of information on tax returns, level of economic development (GDP), trade, foreign direct investment (FDI), agricultural value added (ARG), industrial sector value added (IND), education level, average lifespan, and infant death ratio. The reason for choosing the average lifespan can be summarized as follows;

- Due to their connection to social growth and security, this component has a favorable effect on tax returns.
- Additionally, individuals with larger social security benefits and better access to healthcare are more likely to enhance their economic growth and productivity (Park et al., 2019).
- Conversely, the life span parameter can also have a negative impact on tax

returns because a higher average age in the population means that a greater percentage of people would retire, which will result in a smaller percentage of the population paying taxes (Ramadani et al., 2019).

The infant death ratio is chosen since high levels of development are frequently associated with low rates of infant death in high-income countries. As a result, there is a negative correlation between infant death and tax returns.

Information is gathered from freedom house for the political rights index (POLRIG) and the civil liberties index (CIVLIB) (freedomhouse.org).

Table 1: List of selected countries

No.	Country	No.	Country
1	Singapore,	6	Myanmar
2	Brunei	7	Malaysia
3	Cambodia	8	Philippines

4	Indonesia	9	Thailand
5	Lao	10	Vietnam

Research design

The research used estimate techniques to evaluate the effects of economic, structural, social, and institutional aspects on tax

collections of ASEAN countries for the years 2002–2022 based on the research of Castro & Camarillo (2014). The structure of the fixed-effect panel data analysis is as follows:

$$TAXREV_{it} = \alpha_{it} + \gamma_t + \beta_1GDP_{it} + \beta_2TRADE_{it} + \beta_3FDI_{it} + \beta_4ARG_{it} + \beta_5ING_{it} + \beta_6POLRIG_{it} + \beta_7CIVIB_{it} + \beta_8SCHTER_{it} + \beta_9LIFESPN_{it} + \beta_{10}INFDEATH_{it}$$

Where,

TAXREV represents the dependent variable for tax returns expressed as the percentage of GDP that is attributable to all taxes paid throughout the year

GDP signifies the degree of development of the nation as measured in logs of GDP per capita with GDP in USD fixed prices

TRADE is calculated by total import and export revenues in relation to GDP

FDI is a foreign direct investment; calculated as a percentage of net FDI inflows that have stimulated GDP

ARG is the added value of the agriculture sector

IND is the industry's value-added share. These statistics are compiled throughout time using WDI (World development indicators) statistics

A nation's level of democracy is measured by two indices: POLRIG (political rights index) and CIVLIB (civil liberties index), which include freedoms like freedom of

speech, freedom of assembly, and freedom of religion. These two factors were taken from the directory of the website freedom house and are evaluated on a scale from one to seven, where one represents the highest level and seven the lowest level.

SCHTER is the rate of university enrollment and serves as a proxy for educational proficiency

LIFESPN is an average lifespan
 INFDEATH is the infant death ratio which is determined by counting the number of infant deaths for every 1,000 live births

RESEARCH FINDINGS

Firstly, the design applies the Hausman test with the assumption that there is no association between the characteristic error of the objects and the descriptive factors in the equation calculated using the fixed effects

approach (Baltagi & Baltagi, 2008). Columns 1 and 2 of Table 2 contain the estimation findings (Fix Effect Model, or FEM) and the findings of the Hausman test.

The P-value for the Hausman test is 0.000 <5% hence the null hypothesis, indicating that there is no relationship between the error and the explanatory variables or that the fixed effect assessment is more suitable than the random effect assessment. The research utilizes the heteroskedasticity test and the differential GMM (DGMM) model to evaluate the dynamic model. In this approach, the amount of taxes collected in one period affects the amount of taxes collected in the following period (Arellano & Bond, 1991). Columns 3 and 4 of Table 2 display the outcomes of differential GMM's assessment of a dynamic model.

Table 2: Assessment and test findings

Component	FE	GMM
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	<i>COEF</i>	<i>P = value</i>	<i>COEF</i>	<i>P = value</i>
TAXREV (-1)			0.510	0.005***
TAXREV (-2)			-0.017	0.877
GDP	0.069	0.761	0,997	0.033**
TRADE	2,001	0.001***	1,631	0.001***
FDI	0.068	0.097	0.046	0.299
ARG	-0.099	0.699	-0.089	0.047*
IND	0.004	0.910	-0.040	0.401
POLRIG	0.646	0.117	0.501	0.029**
CIVLIB	-0.799	0.005***	-0.299	0.069*
SCHTER	-0.060	0.071*	-0.017	0.557
LIFESPN	0.266	0.260	-1,939	0.082*
INFSEATH	-0.089	0.029**	-0.007	0.842
Cons	1,997	0.793		
Observations	180		150	
Heteroskedasticity test	0.000***			
Hausman test	0.000***			
AR (2) test	0.17			
Sargan test	0.790			

Note: * represents the level of significance

Dynamic model assessment findings through differential GMM, as demonstrated by the above table, highlighted that, at the 5% level of significance, a country's tax returns are positively correlated with its GDP per capita ($p = 0.033$). This outcome supports both the initial predictions and the results of earlier experiments.

The total trade turnover (TRADE), which has a favorable impact on the economy's openness with a significance level of 1% ($p = 0.001$), comes next. The findings of McKenzie (2021; Omar & Inaba (2020; Piancastelli & Thirlwall (2021) are identical to this one. Countries in the region benefit greatly from their involvement in international trade, particularly through the export of goods. Trade openness lowers obstacles and encourages and streamlines import and export activity, which boosts productivity and generates more money for the government's treasuries. At the significance level of 10% ($p = 0.047$), the percentage of value added in agriculture (ARG)

has a negative influence; this discovery is also comparable with the anticipated consequences and is consistent with the majority of the other discoveries in prior studies. Agriculture is still the dominant sector in these nations, and governments have always placed top importance on agricultural advancement to guarantee food security. However, agricultural activities are more difficult to tax, particularly in low and middle-income countries like the ASEAN region, where production is frequently organized on a small scale, making it challenging to control and supervise. They have implemented a number of initiatives to support agriculture, such as tax reductions that result in a decline in agricultural tax returns.

At the 5% level of significance, the POLRIG has a significant impact ($p = 0.029$), which is also in line with the absolute scenario in ASEAN countries, where the organizational structure is progressively being enhanced, and the strategic planning of tax returns is becoming increasingly strict. At the 10% level

of significance, the CIVLIB has a negative impact ($p = 0.069$). This indicates that low levels of knowledge and a lack of constitutional freedoms will have a negative impact on tax returns. At the 10% level of significance, the average lifespan has a detrimental influence ($p = 0.082$). This indicates that other things being equal, the national income tax will be lower the longer people live.

In the analysis, the components FDI, IND, SCHTER, and INFDEATH have no statistical significance. This implies that when all other factors are held constant, the total national tax return is unaffected by foreign direct investment, the share of industry in the GDP, the degree of education, or the infant death ratio. Previous studies do not support this. The component FDI's lack of statistical significance may be due to the region's multiple tax-exempt statuses, reduced taxes, and tax incentive measures that are in place to entice foreign direct investment. The IND coefficient is not statistically significant. The IND

coefficient is not statistically significant. However, it is uniform with some earlier findings McKenzie (2021; Omar & Inaba (2020; Piancastelli & Thirlwall (2021). The variable degree of education is also not statistically significant in the approach, which is in contrast to the initial assumption and the findings of Piancastelli & Thirlwall (2021) study. When people's intellectual capacity is raised, it will help them earn more money individually and as a society as a whole, raising tax returns for the state budget. However, the level of education component used in this research does not affect how much money the government collects in taxes. Furthermore, the AR (2) test findings with p value = $1 > 5\%$ significance level invalidate the idea that the model exhibits autocorrelation at the initial difference. According to the findings of the Sargan test, the Sargan statistic's p -value is 0.790, which is significantly higher than the level of significance. Thus, it may be said that

the model's instrumental components are appropriate and free of internal features.

CONCLUSION

The study results illustrate that five out of the eight above components have a positive effect on tax returns. This finding is in line with the findings of other researches and with the economic status that now exists in ASEAN nations, where the standard of living and educational attainment are not comparable. This conclusion emphasizes the necessity to carefully take into account the already recognized factors and their importance in having a positive influence on national tax collection, even though the results of this paper's affecting factor analysis do not add anything new to those found in other studies. The improvement of state revenue collection in ASEAN countries can then be addressed with pertinent remedies and/or policy consequences. As a result, the primary theoretical contribution of this study to the body of literature already in

existence is the formulation of recommendations to strengthen the role and enhance the significance of some of the indicators discovered in previous studies in the context of policy initiatives to enhance state tax collection.

RECOMMENDATIONS

Based on the study's findings, the following recommendations can be made;

- Governments in ASEAN countries must take action to raise per capita income in order to raise tax returns. They can continuously and faithfully carry out the objective of enhancing macroeconomic stability, managing inflation, and achieving high growth. They should also actively and adaptably use economic policy tools to closely and synchronously operate with financial measures.
- Establishing a roadmap for global economic integration should be a

priority for the governments of the ASEAN countries since it will improve both taxable income and the rate at which the economy is growing.

- A high-tech agricultural industry must be developed in order to increase the value of this industry while also reducing the value of the agricultural sector in ASEAN countries.
- The ASEAN countries must promote civil rights while also raising the general level of education and sense of community among the populace to boost tax returns.

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