

Investigation Of The Role Of Government And Private In The Economy In 6 Countries In Southeast Asia

Achara Gamon¹, Nanda Terra Yanuar Hadriyono²

¹Mahidol University, Thailand

² Universitas Indonesia, Indonesia

Abstract

The aim of this study is to investigate 6 countries in Southeast Asia on a macro basis and investigate country by country to provide a clear picture of the impact of government and private economic activity on economic growth. Using secondary data in the form of panel data from the world bank, this study focuses on six Southeast Asian nations: Indonesia, Malaysia, Thailand, the Philippines, Cambodia, and Laos over the 2000–2020 research period. The Least Square Panel (PLS) approach is employed in this investigation. We found that consumption and government spending has had a significant positive impact in Indonesia, Malaysia, Thailand, the Philippines, Cambodia, and Laos. But only Indonesia and Cambodia are positively significantly influenced by economic development activities by the government. However, Malaysia, Thailand, the Philippines, and Laos are more influenced by private sector activities which are driven by government activities in developing the economy. This shows that the government's role in encouraging economic growth through government spending is important in the economies of Southeast Asia, especially the 6 countries that are the focus of this research.

Keywords: Government, Private, Economy, Southeast Asia.

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Background

State investment in education provides significant economic returns (Psacharopoulos & Patrinos, 2018), but for different groups of countries, the effect of investment in higher, secondary and primary education is different (Pokhrel & Chhetri, 2021). In developed countries, increased spending on all types of education leads to economic growth, with higher returns for secondary and tertiary education (Ahmed & Wang, 2019). For developing countries, increased spending on primary and secondary education has a bigger impact (Azizi, 2018). Human capital theory considers public spending as an investment in education at the macro level and assesses how profitable it is (Sulisnaningrum, Widarni, & Bawono, 2022).

Economists have repeatedly compared the earnings of educated and uneducated workers (Widarni, Prestianawati, & Bawono, 2020). Research proves that on a micro basis, investment in education is very profitable (Widodo & Prabowo, 2021). State spending on education is much higher than private spending, and their share of spending in the budget is large. Even higher education is provided mainly by the state (Shaturaev, 2021). The state finances both the purchase and maintenance of personnel, these funds are only partially covered by education on a paid basis (Nemec & Špaček, 2020). Investment in the country's industry leads to the introduction of new technologies, increased labor productivity, increased wages for educated workers, and,

along the chain, increased demand in consumer markets, expansion of production and employment (Matthess & Kunkel, 2020).

According to endogenous growth theory, the formation and accumulation of human capital allow for more efficient use of physical capital, which should lead to an increase in GDP per capita (Priyanto, Widarni, & Bawono, 2022). In addition, higher levels of education mean more responsible attitudes toward health, decreased crime, and greater tolerance. In turn, this helps reduce costs for fighting crime and healthcare and, in general, increases the attractiveness of the country, including foreign companies (Felson, Adamczyk, & Thomas, 2019). However, there are difficulties in assessing educational outcomes at the macro level (Caena & Redecker, 2019). Estimates in different studies are very different. Some point to the dependence of economic growth on the share of spending on education, others argue that there is no such relationship, and some consider it only in relation to poor countries (Zhang et al., 2021). At the same time, even rich countries must prioritize budget spending. And for poor countries, the selection of financing in certain areas, taking into account the impact on economic development in the short or medium term, is very important (Chien, Ngo, Hsu, Chau, & Iram, 2021).

The results of education investment by the government as government capital expenditure for developed and developing countries are different (Azizi, 2018). In developed countries, increased spending on all types of education leads to economic growth, and returns to secondary and tertiary education are higher. For developing countries, increased spending on primary and secondary education has a bigger impact (Psacharopoulos & Patrinos, 2018). At the same time, the short-term economic effect of increasing public spending on education in developing countries is small, this is most noticeable, again, with increased funding for primary and secondary education (Popescu & Diaconu, 2021).

The quality of education at home, as determined by the results of international tests, can affect economic development more than its distribution (Zallé, 2019). Enrollment of children in primary and secondary education has a positive impact on GDP (Ihugba, Ukwunna, & Obiukwu, 2019). But rapid economic growth is not necessarily the result of increased spending on education (Kurniawan & Managi, 2018). The choice of educational path is difficult for many people because not everyone can rationally calculate future costs and expenses and assess future benefits (Cuypers, Hennart, Silverman, & Ertug, 2021). Inequality in education increases the stratification of the population, and in this case education loses its beneficial function for society (Preece, 2019).

Investment in education by the state as part of government spending can be financed by taxes. Taxes are the main source of state revenue (Alim, Setiyantono, & Zakiah, 2021). Tax policy is called fiscal. The word "fiscal" from lat means "executive" (Darvas, Martin, & Ragot, 2018). A fiscal officer is called an officer who oversees tax collection and financial affairs (Chen, 2020). In modern economic literature, fiscal policy is associated with state regulation of the taxation system (Yared, 2019).

There are 2 principles of taxation: The principle of solvency means that taxes must depend on the amount of income received (Dmytryk & Makukh, 2020). The principle of profits received means that taxes must be paid in proportion to the profits received by legal entities and individuals from the state (Ting & Gray, 2019). Tax policies need to be implemented in such a way that the tax system becomes efficient. After all, the aim to increase tax pressure in order to refill the state budget may have the opposite effect (Sasongko, 2022).

The lion's share of budget revenues is primarily personal and income taxes (Kozarezenko & Tochylyna, 2018). Most European countries, including Russia, mainly use VAT, although many

economists consider this tax to be ineffective and encourage inflation (Ayub & Pusparini, 2022). In addition to increasing the budget, taxes also perform a broad regulatory function in the economy (Chugunov, Pasichnyi, Koroviy, Kaneva, & Nikitishin, 2021). Progressive income taxes increase incentives to increase income (Abuselidze, 2020). Accelerated depreciation policies have been actively used to stimulate revenue-reducing growth for the renewal of obsolete equipment and economic development (Gale, Gelfond, Krupkin, Mazur, & Toder, 2018).

Increased national productivity can also be indicated by public consumption or domestic consumption (Mason-D'Croz et al., 2019). An increase in public consumption indicates an increase in people's income and productivity in general (Devi, Warasniasih, Masdiantini, & Musmini, 2020). However, not all countries rely on economic activity in the real sector which is dominated by the private sector (Fana, Torrejón Pérez, & Fernández-Macías, 2020). There are several countries that actually use government spending as the main impetus for the economy (Musaiyaroh & Bawono, 2018). Total credit is an indication other than consumption which indicates private sector activity in meeting community needs (Bawono, 2021). The aim of this study is to investigate 6 countries in Southeast Asia on a macro basis and investigate country by country to provide a clear picture of the impact of government and private economic activity on economic growth.

Research method

This research focuses on 6 countries in Southeast Asia, namely Indonesia, Malaysia, Thailand, the Philippines, Cambodia, Laos employing panel data as secondary data over the study period of 2000–2020. The World Bank provided the data for this study. The Least Square Panel (PLS) approach is employed in this investigation. Although the PLS method is a variation of OLS, the data are presented as panels. The function is then turned into the following econometric model:

$$G_{it} = \alpha + \beta_1 Co_{it1} + \beta_2 Cr_{it2} + \beta_3 Cx_{it3} + e_{it}$$

Where,

G = Economic growth

Co = Public consumption

Cr = Credit growth

Cx = Government expenditures

e = Error term

i = Cross section

t = Time

Results and Discussion

The initial stage in this study was to do the chow test which is presented in table 1.

Table 1. Chow Test

Effects Test	Stat.	d.f.	Prob.	
Cross-section F	12.516827	(4,52)	0.0000	The fixed effect model
Chi-square	41.624252	4	0.0000	

is the most effective, according to the Chow Test results. The results of the Hausman test are shown in the table below:

Table 2. Hausman Test

	Chi-Sq Stat.	Chi-Sq. d.f.	Prob.
Cross-section Random	29.421151	2	0.0000

The The best model is still a fixed effect model since estimate results from the Hausman test conducted reveal a probability value of 0.0000 less than alpha 5%.

Table 3. Results of the PLS Method with the Fixed Effect Model

Variable	Coefficient	t-Stat.	Prob.
C	2.962661	59.82625	0.0000
Co	0.911215	9.11256	0.0000
Cr	-0.012252	-3.421141	0.0000
Cx	1.411232	1.732113	0.0677
<i>R-squared</i>		0.791231	
<i>Adj R-squared</i>		0.741132	
<i>F-Stat.</i>		58.24432	
<i>Prob (F-Stat.)</i>		0.000000	
t-tabel		1.55712	

In six Southeast Asian nations, consumption significantly boosts economic growth. However, total credit actually has a significant negative impact on the 6 countries that are the object of research in this study. Capital expenditure has a significant positive impact on economic growth

Table 4. Individual Effects on Fixed Effect Models

CROSSID	Effect
Indonesia	0.217146
Malaysia	-0.226185
Thailand	-0.137762
the Philippines	-0.154356
Cambodia	0.032338
Laos	-0.025269

Table 5 lists Indonesia and Cambodia as two nations with positive coefficient values. This demonstrates how changes in economic activity have an impact on economic growth in the two nations. Additionally, this occurs as a result of viable infrastructure and population growth. In contrast, negative values occurred in four countries, namely Malaysia, Thailand, the Philippines, and Laos.

Table 5. Heteroscedasticity Test

Variable	Probability
Co	0.6231
Cr	0.5432
Cx	0.2778

The probability of each variable having a value of more than 5% allows one to draw the conclusion that the traditional heteroscedasticity assumption is satisfied.

Table 6. Multicollinearity Test

	Consumption	Credit	Capital Expenditures
Co	1.000000	0.311121	0.492212
Cr	0.311265	1.000000	0.623113
Cx	0.442212	0.623271	1.000000

The multicollinearity test findings show that every independent variable has a value of less than 0.8, which leads one to the conclusion that the multicollinearity assumption is true.

Conclusion

Consumption and government spending has had a significant positive impact in Indonesia, Malaysia, Thailand, the Philippines, Cambodia, and Laos. But only Indonesia and Cambodia are positively significantly influenced by economic development activities by the government. However, Malaysia, Thailand, the Philippines, and Laos are more influenced by private sector activities which are driven by government activities in developing the economy. This shows that the government's role in encouraging economic growth through government spending is important in the economies of Southeast Asia, especially the 6 countries that are the focus of this research.

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