IMPACT OF URBANIZATION, PUBLIC SPENDING, FINANCIAL DEVELOPMENT AND ECONOMIC GROWTH IN SOUTHEAST ASIA

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Abstract: ***Southeast Asia has an important contribution in terms of geopolitical and economic position in Asia. Governments have increased public spending, in addition to greater urbanization rates and financial development in order to create economic growth in the region. This research was conducted in ASEAN6 countries in the period of 2000 to 2020, the research results confirm that financial development and urbanization rate have no impact on economic growth. However, there exists a positive relationship of foreign direct investment and a negative relationship of government spending on economic growth in ASEAN6.***

• Keywords: *ASEAN, government spending, finance, growth.*

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Tóm tắt: *Khu vực Đông Nam Á ngày càng có vị trí quan trọng trong khu vực châu Á về vị trí địa chính trị, kinh tế. Chính phủ các nước gia tăng chi tiêu công, bên cạnh sự cải thiện về tốc độ đô thị hóa cao cùng với sự phát triển của thị trường tài chính nhằm tạo động lực lên tăng trưởng kinh tế trong khu vực. Bài nghiên cứu này thực hiện tại các nước ASEAN6 trong giai đoạn 2000 đến 2020, kết quả khẳng định rằng phát triển tài chính và tỷ lệ đô thị hóa không có tác động lên tăng trưởng kinh tế trong khu vực. Tuy nhiên, tồn tại mối quan hệ tích cực của vốn đầu tư trực tiếp nước ngoài và quan hệ tiêu cực của chi tiêu chính phủ lên tăng trưởng kinh tế trong ASEAN6.*

• Từ khóa: *ASEAN, chi tiêu công, tài chính, tăng trưởng.*

1. Introduction

Southeast Asia is considered as a dynamic economic development region located in Southeast Asia. The geopolitical position of Southeast Asia is bordered by major economic powers such as China, Japan, Korea, and India. In addition, Southeast Asia locates on the international container shipping lines where goods are transported from Asia to Europe, America and the rest of the world. It has greatly brought huge opportunities in attracting foreign direct investment, developing financial markets, as well as improving economic growth and per capita GDP in the region.

Southeast Asia currently has 11 countries and has different levels of economic development. A group of countries of small economies such as East Timor, Laos, Cambodia, Myanmar and Brunei, in contrast to a group of countries of large economies such as Indonesia, Thailand, Malaysia, Indonesia, Philippines and Vietnam (also known as ASEAN6) contributes largely to the region's economy.

The economic development of ASEAN in general and ASEAN6 in particular is associated with a high rate of urbanization in the region. More specifically, Singapore has urbanized rapidly since the 1950s, with 100% population now defined as urban citizens, while countries such as the Philippines, Indonesia or Vietnam are also in a period of rapid urbanization expansion nowadays. The rapid urbanization process leads to the demand for consumption, markets and investment, as well as the improvement of the expanded financial and banking system (Turok and McGranahan, 2019). According to the State Bank of Vietnam (2020), the financial system in the region is undergoing a strong

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digital transformation to adapt and overcome the challenges of the 4.0 technology revolution. Therefore, countries are making joint efforts to build an efficient and sustainable ASEAN banking system, with a focus on: (1) promoting financial inclusion; (2) banking integration and network information security; (3) payment connectivity and sustainable financial development, with the ultimate goal of economic growth in the region.

Therefore, it is urgent to carry out this study with its objective of assessing the impact of urbanization, financial development and public spending on economic growth in ASEAN countries. The study was carried out in the main countries in the region such as Indonesia, Thailand, Malaysia, Indonesia, the Philippines and Vietnam from 2000 to 2020, the research results support the recommendations for decision for policymakers, researchers reassess development goals in Southeast Asia.

In addition to the introduction, the rest of the study has four parts. Section 2 of the study discusses previous studies. Sections 3 and 4 of the study discuss data sources, research methods and research results. Finally, the conclusion of the study is presented in Section 5.

2. Literature review

A majority of economies are always increasing public spendings to meet economic development, especially building urban development programs and upgrading infrastructure for industrialization and modernization of the country. The financial sector, typically the commercial banking system plays an important role in providing capital to the economy in order to create resources for businesses in production and business activities.

According to Lewis (1955), a developing economy has two parallel economic sectors, namely: the traditional economic sector associated with agricultural production and the modern economic sector associated with industrial production. In developing countries, the urbanization rate is still low, therefore the process of urbanization has provided an opportunity to shift labor from rural areas to cities. It is evident that workers are able to find higher-quality jobs and thus increase labor productivity as well as increase economic development. Economic growth can come from many different causes and has been done through previous studies, such as the speed of urbanization as in the study of Nguyen Minh Ha and Nguyen Dang Le (2020); financial development as in Pradhan et al. (2017), Hao et al (2018), Wu et al (2020), Rahman et al (2020) or public spending and growth as research by Rahman et al (2020), Onifade et al (2020).

According to Nguyen Minh Ha and Nguyen Dang Le (2020), there is a positive impact of urbanization on economic growth when the urbanization rate is less than 69.99%, conversely when the urbanization rate is higher than 69.99%, there exists a negative relationship. It confirms that urbanization has both positive and negative effects on growth. For financial development, there exists an impact between financial development and growth, as in the study of Hao et al. (2018), the author argued that financial development has a negative impact on growth in China. Meanwhile, there exists a long-term relationship between financial development and growth in China, Japan and India from 1960 to 2016 and these countries need to continue to improve financial markets in order to support economic growth in the long run (Wu et al., 2020). In that context, when the banking system creates many advantages for people to easily access services and products, the financial market has a lot of room for development and growth (Pradhan et al., 2017).

Some previous studies also found a negative effect of public spending on economic growth, as in Rahman et al. (2020) study conducted in Pakistan, a developing country in South Asia. Similar to the study of Onifade et al. (2020) also said that Nigeria needs to improve the quality of public expenditures, especially public investments in infrastructure need to be more efficient to create benefits for socioeconomic development.

Another possibility, Nguyen Minh Kieu et al. (2016) studied in 8 ASEAN countries, including Vietnam, and suggests that there exists a negative effect of financial development on growth, but there is a strong relationship between FDI and growth. Expanding research to evaluate the interaction between financial development and FDI, Nguyen Minh Kieu et al. (2016) argued that financial development does not change the impact of FDI on growth. Another study in Vietnam, Nguyen Danh Khoi (2021) indicated that Quang Nam is a locality that has been assessed to have many successes in attracting FDI in recent years and is an important source of additional capital contributing to the process of local economic development. In previous studies, studies evaluating the relationship between FDI and growth in the local area are limited, so the authors conducted the research to evaluate the relationship between FDI and growth in Quang Nam and can offer appropriate solutions for other localities in the country. Through the research, the authors confirmed the positive impact of foreign direct investment on economic growth in Quang Nam province. In addition, the rate of urbanization has the effect of attracting foreign direct investment, thereby indirectly promoting economic growth.

3. Data sources and research methodology

3.1. Data sources

For this study, data on urbanization, financial development and economic growth were obtained from the World Bank, and also from the General Statistics Office of each country in the Southeast region. The study uses data from 1990 to the end of 2020.

3.2. Research methodology

Based on previous studies, in this study, the author uses to assess the relationship of urbanization, public spending, financial development to economic growth based on multivariate regression on balanced panel data. Suggested in previous research by Nguyen Minh Ha and Nguyen Dang Le (2020), Nguyen Minh Kieu et al. (2016), Wu et al (2020), Rahman et al (2020), Onifade et al (2020) the proposed regression equation is as follows:

$$GDP_{it} = b_0 + b_1FD_{it} + b_2URBAN_{it} + b_3FDI_{it} + \beta_4GOV_{it} + u_{it}$$

Where:

GDP_{it}, is the parameter representing the economic growth of country i at year t, measured by the economic growth rate (%),

FD_{it}, is a parameter representing the development of the financial market of country i at year t, measured by the broad money supply (M2/GDP),

$URBAN_{it}$, representing for the urbanization rate of country i at year t,

FDI_{it}, representing for foreign direct investment (realized capital) compared to the GDP of country i at year t,

GOV_{it}, is a representative parameter for government expenditure, expressed as % of GDP of country i at year t.

4. Research results

4.1. Descriptive statistics

The statistical statistics results are described in Table 1 at ASEAN6 countries, including Vietnam, Malaysia, Thailand, Indonesia, Singapore and the Philippines. The overall sample has 120 observations, the research period is from 2000 to the end of 2020, there are 5 variables used in the model, including economic growth -GDP, financial development -FD, public expenditure -GOV, urbanization rate -URBAN and foreign direct investment -FDI.

Table 1. Descriptive statistics

Variable	Mean	Std. Dev	Min	Max
GDP	4.77	3.09	-9.57	14.52
FD	95.69	36.75	36.00	164.86
URBAN	56.51	23.19	24.37	100
GOV	10.68	2.91	5.46	17.69
FDI	5.69	7.10	-2.75	32.16

Source: Analyzed by authors

The ASEAN6 countries are the main growth engines in Southeast Asia and contribute largely to the region's economy. In fact, the economic growth rate of the ASEAN6 countries reached an average of 4.77% during the period of the research, but it is evident that it exists the country with a high growth rate of 14.52% or very low growth rate of -9.57%. It shows that the economic growth of ASEAN6 countries has a high fluctuation. Regarding financial development, ASEAN6 countries' financial market is significantly improved, the money supply has expanded to be approximately 95.69% of GDP. However, ASEAN6 countries' financial development is uneven, some countries have a high level of financial development like

Singapore, but some countries have a low level of financial development like the Philippines. As for the rate of urbanization, Singapore has an urbanization rate of 100%, but countries like Vietnam and the Philippines have a low level of urbanization.

Table 2. Correlation matrix

Variable	GDP	FD	GOV	URBAN	FDI
GDP	1.0000				
FD	-0.1528 (0.0916)	1.0000			
GOV	-0.3724 (0.0000)	0.3393* (0.0001)	1.0000		
URBAN	-0.1152 (0.1989)	0.3908* (0.0000)	0.1543 (0.0845)	1.0000	
FDI	0.1021 (0.2669)	0.3815 (0.0000)	-0.1311 (0.1535)	0.7195 (0.0000)	1.0000

Source: Analyzed by authors

Correlation analysis aims to eliminate the possibility of multicollinearity in the research model, if the correlation coefficient is less than 0.8, multicollinearity will be eliminated. The results of Table 2 show that, the largest correlation coefficient occurs between the pair of variables URBAN and FDI, and is less than 0.8, so the research model is satisfied without the possibility of multicollinearity. In addition, the results of Table 3 also show that the variance inflation factor (VIF) is less than 10.

Table 3. Variance inflation factor

Variable	VIF	1/VIF
FDI	2.61	0.383275
URBAN	2.37	0.421644
FD	1.41	0.709496
GOV	1.37	0.731044
Mean VIF	1.94	

Source: Analyzed by authors

4. Research results

For the panel data, it is common to encounter defects such as heteroskedasticity and autocorrelation. To solve the model's defects, the study should use the FGLS analysis method (feasible generalized least squares). In addition, the study carried out the robustness test through the panel corrected standard error method (PCSE), the estimated results are presented in Tables 4 and 5 as follows:

Table 4. Estimation results-FGLS

No.	Variable	Coefficient	S.E	t-statistic	Pvalue
1	FD	-0.0029	0.0061	-0.48	0.631
2	URBAN	-0.0203	0.0125	-1.62	0.105
3	GOV	-0.1961**	0.0778	-2.52	0.012
4	FDI	0.0755*	0.0430	1.75	0.080
5	_cons	8.3061	0.8349	9.95	0.000
6	Number of observations: 120 Number of groups: 20 Wald chi2(3) = 18.42 Prob > chi2 = 0.0010 Log likelihood = -257.4012				

*Note: *, ** correspond to the significance level of 10%, 5%*

Source: Analyzed by authors

Table 5. Estimation results -PCSE

No.	Variable	Coefficient	S.E	t-statistic	Pvalue
1	FD	-0.0029	0.0072	-0.41	0.681
2	URBAN	-0.0203*	0.0114	-1.78	0.074
3	GOV	-0.1961**	0.0853	-2.30	0.021
4	FDI	0.0755*	0.0468	1.61	0.097
5	_cons	8.3061	0.7615	10.91	0.000
6	Number of observations: 120 Number of groups: 20 Wald chi2(3) = 18.04 Prob > chi2 = 0.0012				

*Note: *, ** correspond to the significance level of 10%, 5%.*

Source: Analyzed by authors

Table 4 and Table 5 show that the results of the model are reliable, the Prob value > chi2 = 0.0010 - 0.0012 and less than 0.05. The results confirm that financial development and urbanization rates have no impact on economic growth in ASEAN6 countries. It confirms that the development of the financial system has not brought economic growth in Southeast Asian countries. Moreover, the rate of urbanization in Southeast Asia increases sharply in the period 2000 to 2020, therefore people's living standards are likely to improve and lead to an increase in consumer demand, and a larger market, but the benefits of urbanization have not yet brought growth to the region.

Public spending has a negative effect on economic growth. Specifically, a 1% increase in public spending in gross domestic product will reduce GDP by 0.1961% and this reduction is relatively large. It confirms that public spending has a negative impact on economic growth in Southeast Asia. This phenomenon can be explained that when public spending increases, it will raise interest rates in the market and reduce private investment, causing investment crowding in Southeast Asian countries. In addition, except for Singapore which is rated as the world's leading transparent country, other countries in the region have low institutional quality, potentially inefficient public spending, and high ICOR, it leads to low overall efficiency. The case of Southeast Asian countries similar to Nigeria in the study of Onifade et al. (2020) public spending has a negative impact on Nigeria's economic growth. To maintain growth, Nigeria must improve the quality of public spending, and the efficiency of capital use in order to create momentum of economic growth.

Foreign direct investment has a positive effect on economic growth. Specifically, increasing this capital by 1% will increase economic growth by 0.0755%. However, this empirical evidence is relatively weak and is only satisfactory at the 10% significance level. This can explain that countries like Vietnam, Singapore or Malaysia are considered to be relatively successful in attracting foreign direct investment flows, creating many jobs and improving the productivity of domestic companies and economic growth. However, Indonesia and the Philippines did not really succeed in attracting these international capital flows, but these countries still maintained high growth. Therefore, FDI inflows are not the main driver of economic growth in Indonesia and the Philippines. This finding is also supported by Nguyen Danh Khoi (2021) in Vietnam, Nguyen Minh Kieu et al. (2016) studied in 8 ASEAN countries including Vietnam, and especially all authors indicated the international flows have greatly contributed in enhaning economic growth. Therefore, devloping countries need to improve more administrative procedures to facilitate the investment environment in attracting foreign direct investment capital flows for economic development.

5. Conclusions

The strong urbanization process has created a lot of potential in the development of financial markets in particular and economic development in general in Southeast Asia. The study assesses the impact of urbanization, financial development and public spending on economic growth in 6 ASEAN countries that are the main economic pillars in the region in the period 2000 to 2020, the research results show that financial development and urbanization rates have no effect on economic growth. In addition, public spending has a negative impact on economic growth in ASEAN6 countries which means that the potential for crowding out of investment and/or the quality of public investment in the region is low. Finally, the study also finds evidence of a positive impact of foreign direct investment on economic growth in ASEAN6.

The study has a number of policy implications, ASEAN6 countries continue to improve the quality of public spending by: enhancing the quality of public investment through improving accountability and increasing transparency in investment. Second, ASEAN6 countries continue to improve the investment environment to create favorable conditions for foreign investors to expand their business in ASEAN6 countries, thereby helping countries have additional capital sources forinvestment, job creation as well as ultimately sustainable economic growth.

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