

Quality Analysis of Human Development in ASEAN-5 Countries

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| ARTICLE INFO | ABSTRACT |
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| <p>Keywords: HDI, GDP, Education, Health.</p> | <p><i>The Human Development Index (HDI) is an important indicator that measures human welfare and development in a country along three main dimensions: life expectancy, education, and per capita income. Countries in ASEAN, despite their regional similarities, differ in the quality of human development. This research analyzes the factors that influence HDI in 5 ASEAN countries: Indonesia, Malaysia, Thailand, the Philippines and Vietnam. The research uses panel data for the 2012-2020 period with the Fixed Effect Model. Secondary data was obtained from the World Bank and UNDP. The results of the study show that government spending in the education sector has a significant effect on HDI, while GDP and government spending in the health sector do not have a significant effect on HDI in the 5 ASEAN countries investigated. Future studies can consider additional factors that influence HDI in the 5 ASEAN countries. ASEAN, such as poverty levels and quality of life. Therefore, further research can complete understanding of the factors that influence human development in the ASEAN region.</i></p> |

INTRODUCTION

The development of modern science and knowledge has provided many benefits in various aspects of life. This encourages countries to compete in improving the welfare of their populations through development. In achieving this goal, governments play an important role by designing development policies and programs. The policy is a form of effort to improve the quality of development both in terms of economy and resources. Through development, it is expected to increase accessibility and improve the standard of living of the community (Rini & Sugiharti, 2016). Positive economic growth can create job opportunities, increase individual incomes, and support infrastructure development that supports community welfare. Thus, development is not just an economic statistic, but also about creating positive changes that are felt by all levels of society (Handalani, 2019).

Positioning people as the main assets of the state in the context of human development emphasizes that the welfare of society becomes the main and most important goal in development. This concept is in line with the view Costantini & Monni, (2008) which emphasizes that human development should be a central focus in international development policy. Therefore, improving the quality of life, access to education, health, and reducing community inequality are the main foundations in planning and implementing development policies. Refers to views (Anand & Sen, 2000;Ma'rif et al., 2020), Human development is not only a means to achieve temporary goals, but as an effort towards a healthier and more prosperous life in the long run. Therefore, the Human Development Index (HDI) is key in measuring the quality of people's lives, covering non-physical aspects such as life expectancy, and physical aspects such as literacy rates and average length of schooling.

Asean is a regional organization established in 1967. There are ten countries that joined this organization, including Singapore, the Philippines, Thailand, Laos, Cambodia, Vietnam, Indonesia, Brunei Darussalam, Malaysia, and Myanmar. The organization aims to create a peaceful and peaceful Southeast Asian region. ASEAN wants to improve the welfare of life through the provision of facilities and good access to human development opportunities. This is done by encouraging investment in education, workforce training for potential development, increasing the use of English, entrepreneurial innovation, and information technology.

However, there are still problems that hinder the achievement of the goals of the establishment of Asean. This problem is about the indirectness of development in ASEAN countries. This is a concern for ASEAN countries, especially for member countries whose economic growth is still lagging behind. This condition can be seen in Figure 1 which illustrates the condition of the quality of the Human Development Index (HDI) in ASEAN countries in 2020. It can be seen that HDI with "very high" criteria has been achieved by countries such as Malaysia, Brunei Darussalam, and Singapore. Meanwhile, countries such as Indonesia, the Philippines, Thailand, and Vietnam recorded HDI with "high" criteria. The HDI criteria of "medium" are in Laos. While Myanmar and Cambodia are at HDI with "low" criteria.



Figure 1. HDI of ASEAN Countries
Source : UNDP, 2020 (processed)

Figure 2 illustrates the human development charts of five ASEAN countries, namely Indonesia, Malaysia, Thailand, the Philippines, and Vietnam. Although these countries have almost similar characteristics, there are significant differences in the human development index, which categorizes them into different classifications. From 2012 to 2020, there was an increase in the percentage of human development although the rate of increase was not so high. Malaysia consistently occupied the highest position in every period, while Thailand was almost on par with Malaysia. On the other hand, the positions of Indonesia, the Philippines, and Vietnam tend to be similar, although there is an increase every year.

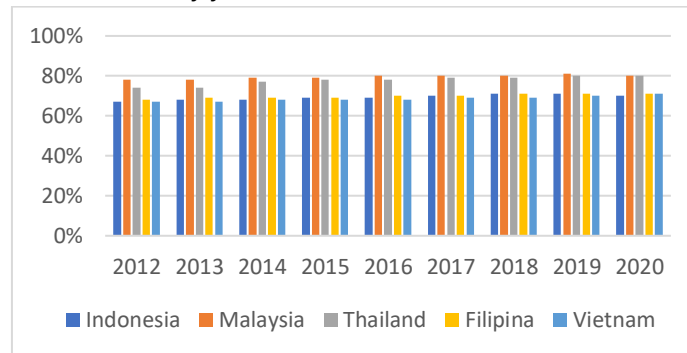


Figure 2. HDI in 5 ASEAN Countries
Source : UNDP, 2020 (processed)

Hansun & Kristanda, (2019) said that human resource development is an effort to develop the quality or ability of human resources through the process of planning education, health, training and management of personnel or employees to achieve an optimal result. Through the development of human resources, it is expected to expand decent life opportunities because human capital that refers to improving education and health is the most important development goal. According to Akbar, M. F. (2016) Education is defined as the maintenance of cultural heritage through generational transfer, as well as efforts to increase self-potential so that individuals have self-control, intelligence, personality, morality, religion, and creativity. Government strategies, such as the 9-year compulsory education program, free education policy, and the School Operational Assistance Fund (BOS). The length of education in school can affect how high the HDI is in each region. Education contributes significantly to socioeconomic development and allows education to produce good employability by improving attitudes, understanding, proficiency, and creativity (Kusumaningrum, 2018).

The next goal is health. The health of the population directly affects the quality of HDI. Countries with good health systems, broad access to medical care, and effective public health programs tend to have higher life expectancies. In addition, several National Health Insurance Programs and Healthy Indonesia Cards (JKN-KIS)

play a major role in improving health levels (Dartanto, 2017). Good health can also increase per capita income because healthy people tend to be more productive at work, have the ability to work longer and consistently, and have lower absenteeism rates because they have no health problems. Therefore, investment in health can affect HDI and improve the quality of life of the population.

Sukirno (2005) states that government spending is a government action to regulate the course of the economy by determining the amount of government revenue and expenditure to consume goods and services in order to meet the needs and services of the community in encouraging human resource development. According to research Mahendra (2020) Regarding the effect of government spending on the human development index, it is stated that government spending has a significant effect on the human development index. Through the right allocation of spending, public sector improvements can be created. So that it can support community activities.

From the description above, human resource management and economic resource management capabilities are very important in realizing the goal of the formation of ASEAN that ensures security and welfare for its member countries. Therefore, the study is entitled "Analysis of the Quality of Human Development in Asean-5 Countries".

METHOD

The method in this study applies panel data in the period 2012-2020 where the objects are five ASEAN countries, namely Indonesia, Malaysia, the Philippines, Thailand, and Vietnam. The use of data in this study is secondary data sourced from the World Bank and the United Nations Development Programme (UNDP). While the use of variables in this study is HDI and GDP, government expenditure in the education and health sectors. In analyzing the data in this study, panel data analysis was used in the Fixed Effect Model (FEM) model. The formula of the model is:

- $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + eit$
- Y = 5 Asean countries Human Development Index (percent)
- X_1 = Economic Growth (GDP) of 5 ASEAN countries (percent)
- X_2 = Education sector government spending (percent)
- X_3 = Health sector government spending (percent)

Panel data analysis involves three models, in the form of Common Effect, Fixed Effect, and Random Effect. In order to select a suitable model, the first step involves testing between Common Effect and Fixed Effect models in the use of the Chow test. If the test results show significance (F-statistic > F-count or P-value < α 0.05), then the model used is Fixed Effect, and the next step is to test in order to decide whether the Random Effect model is relevant or not. In the next stage, the Fixed Effect model is tested against the Random Effect model using the Hausman test to determine the most suitable model in the final estimate. If the test results are significant (chi-sq statistics > chi-sq table or P-value < α 0.05), then the most appropriate model is Fixed Effect. Conversely, if the test results are not significant (chi-sq statistics < chi-sq table or P-value > α 0.05), then the suitable model is Random Effect.

RESULTS AND DISCUSSION

The results of this research found that variables, government spending in the education sector had a significant impact while GDP and government expenditure in the health sector did not have a significant impact on the HDI of five ASEAN countries, namely Indonesia, Malaysia, Thailand, the Philippines and Vietnam.

Table 1. Test Results Chow Test

| Effects Test | Statistic | d.f. | Prob. |
|--------------------------|------------|--------|--------|
| Cross-section F | 108.986755 | (4,37) | 0.0000 |
| Cross-section Chi-square | 114.662946 | 4 | 0.0000 |

Source: data processed with e-views 10

In conducting a test in the selection between Common Effect and Fixed Effect, the Chow Test was used, it was found that the probability of the result was 0.0000 < 0.05, below the α significance level at the level of 1%, indicating the level of significance. Therefore, Fixed Effect becomes the chosen model, and the next step is to continue the analysis into the Random Effect model.

Tabel 2. Get the Aji Human Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

| Test Summary | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob. |
|----------------------|-------------------|--------------|--------|
| Cross-section random | 213.185084 | 3 | 0.0000 |

Source: data processed with e-views 10.

After testing the comparison between Fixed Effect and Random Effect in the use of the Hausman Test, it was found that the probability is $0.0000 < 0.05$, which indicates the level of significance. Therefore, the most suitable model is the Fixed Effect Model. Below are the final estimation results in the use of the Fixed Effect model."

Table 3. Regression Results Fixed Effect Models

| Variable | Coefficient | t-Statistic | Prob | Significant |
|----------------------|-------------|-------------|------------------------------|---------------|
| C | 0.713969 | 13.75799 | 0.0000 | Significant |
| PDB | 0.000293 | 0.323874 | 0.7479 | Insignificant |
| Education | -0.003068 | -2.375760 | 0.0228 | Significant |
| Health | 0.018346 | 1.583365 | 0.1218 | Insignificant |
| R-squared : 0.941945 | | | F-Statistic : 85.76084 | |
| | | | Prob(F-statistic) : 0.000000 | |

From the table above, it can be seen that the coefficient of determination (R^2) is 0.946551 or 94.65%, this means that the human development index can be described by variables of economic income, government expenditure in the education sector and government expenditure in the health sector of 94.65% while the remaining 5.35% is explained by other variables outside the model.

The Effect of Economic Growth on HDI

The first hypothesis test carried out was the effect of economic growth on the human development index in the five ASEAN countries, where the results of the regression panel data found that the coefficient number was 0.000293 with a probability value of 0.7479 which was greater than 0.05 so that it could be concluded that the GDP variable had a positive and insignificant effect on the human development index. That is, every increase in GDP by 1% will increase the human development index by 0.000293%.

These results are in line with research (Ghazi, n.d, 2023) which states that GDP has a positive and insignificant impact on HDI. Uneven economic growth will affect the quality of human development. Because, if economic growth is not distributed evenly and most of its benefits are enjoyed by the rich groups, while the poor remain marginalized, then inequality in income distribution can increase. This can lead to no significant improvement in living standards for underprivileged groups.

The Effect of Education Sector Government Spending on HDI

The second hypothesis test carried out was the effect of government spending in the education sector on the human development index in the five ASEAN countries, where the results of the regression of panel data found that the variable government expenditure in the education sector stated a coefficient of -0.003068 with a probability value of 0.0228 which is smaller than 0.05 so that it can be concluded that the GDP variable has a negative and significant effect on the human development index. That is, every increase in government spending in the education sector by 1% will decrease the human development index by 0.003068%.

The research is aligned with research (Anantika & Sasana, 2020) which illustrates that the human development index is negatively and significantly influenced by government spending on the education sector and economic development. This problem can occur because government spending to meet the budget needs of the education sector cannot be met, especially if fiscal revenues or government funds are limited. Factors such as government debt, low tax revenue, or an economic crisis can result in budget constraints. This can hamper the government's ability to meet education needs, including financing programs to improve the quality of education, building facilities, and recruiting teachers (Jean & Mongan, 2019).

The Effect of Health Sector Government Spending on HDI

The third hypothesis test carried out was the effect of health sector government spending on the human development index in the five ASEAN countries, where the results of panel data regression found that the variable influence of health sector government spending stated a coefficient of 0.018346 with a probability value of 0.1218

Which is greater than 0.05 so that it can be concluded that the variable government expenditure in the health sector has a positive and insignificant effect on the human development index. This means that every 1% increase in health sector government spending will increase the human development index by 0.018346%.

This is in line with Research (Sukirna, 2016) which results in the fact that government spending in the health sector has a positive and insignificant impact on the human development index directly. This is due to the high share of household expenditure on overall health financing, caused by the failure of some national health systems to ensure financial protection through adequate levels of public health funding, increasing financial insecurity as this forces households to sacrifice financial resources to meet health care needs (Xu et al., 2003). It is true, health financing policies directly affect financial protection for medical services, as health systems must rely on public health revenue sources to ensure people are not exposed to financial hardship or necessary health services (Reeves et al., 2015; Jowett et al., 2015 ; WHO, 2008).

Undoubtedly, people's financial hardship due to medical spending is inherent in underfunded public health systems in low- and middle-middle-income countries, such as Ethiopia, Guatemala, India, Indonesia, and Vietnam. Government spending in the health sector may be inefficient or vulnerable to corruption. Funds that should be used to improve public health services can be wasted or misused, so government spending in the health sector may not be distributed fairly, so that some regions or groups of people do not get comparable benefits. This can lead to inequalities in access to healthcare and negatively impact HDI.

KESIMPULAN

Based on the results of this study, regarding the analysis of the quality of human development in the five ASEAN countries during the period 2012-2020 using a panel data regression estimation model, researchers found that government spending in the education sector had a negative and significant impact on improving the quality of human development. Meanwhile, economic growth and government spending in the health sector have a positive insignificant impact on the quality of human development.

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