



## Determinants of Economic Growth in the Selected ASEAN Countries

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### Abstract

*This study aims to analyze the effect of exports, imports, literacy rates, life expectancy at birth, and tourist visits on economic growth in 4 ASEAN countries from 2010-2019. This study uses panels data from four ASEAN Countries countries (Brunei Darussalam, Indonesia, Malaysia, and Singapore) from 2010 to 2019. The research method used is panel data regression analysis. The results showed that exports and tourist visits have negative and not significantly to economic growth, imports have positively and significantly to economic growth, and literacy rates and life expectancy have negative and significantly to economic growth.*

**Keywords:** *Export, Import, Literacy Rate, Life Expectancy at Birth, Tourist Visit, Economic Growth*

### Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh dari ekspor, impor, angka melek huruf, angka harapan hidup saat lahir dan kunjungan turis terhadap pertumbuhan ekonomi di empat negara ASEAN. Penelitian ini menggunakan data panel di empat negara ASEAN (Brunei Darussalam, Indonesia, Malaysia, and Singapore) dari tahun 2010-2019. Metode penelitian yang digunakan adalah analisis regresi data panel. Hasil penelitian menunjukkan bahwa ekspor dan kunjungan wisatawan berpengaruh negatif dan tidak signifikan terhadap pertumbuhan ekonomi, impor berhubungan positif dan signifikan terhadap pertumbuhan ekonomi, angka melek huruf dan angka harapan hidup saat lahir berpengaruh negatif dan signifikan terhadap pertumbuhan ekonomi.

**Kata Kunci:** *Ekspor, Impor, Angka Melek Huruf, Angka Harapan Hidup Saat Lahir, Kunjungan Turis, Pertumbuhan Ekonomi*

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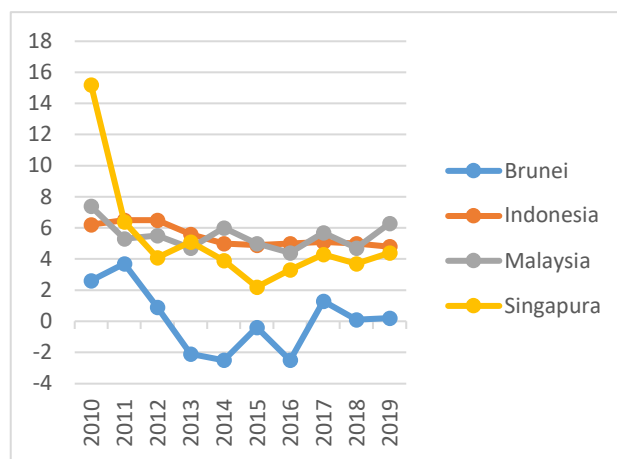
## INTRODUCTION

The condition of the economy is very important in a country. Economic growth is a parameter or measurement tool in the analysis of the economy of a country each year by looking at the activity of the production of both goods and services from year to year. ASEAN is an organization consisting of countries in Southeast Asia which amounts to 10 countries, namely Indonesia, Singapore, Malaysia, Thailand, Philippines, Cambodia, Laos, Brunei Darussalam, Vietnam, and Myanmar.

Of the 10 countries, the average is in the category of developing countries and Singapore in the category of developed countries. In this study, using 4 of the state as the object under study, namely Indonesia, Singapore, Malaysia, and Brunei Darussalam, because of the growth of the economy in 4 countries this tends to be more volatile and tends to decrease every year. Other countries in ASEAN have economic growth fluctuated but tended to increase each year, which becomes the reason for the 4 countries selected in this study.

Based on figure 1 the economic growth of 4 ASEAN countries from the years 2010-2019 showed a decline in the economy each year. Brunei Darussalam has decreased significantly every year, a decline from the year 2010 to 2019, the economic growth of the highest in the year 2010 at 3.7%, and the lowest in 2014 and 2016 at -2.5%. Country Indonesia is also experiencing the same thing as the country of Brunei Darussalam, the economic growth in the country of Indonesia has fluctuated each year, the economic growth most high occurred in 2011 amounted to 6.5% and the slowest economic growth occurred in the year 2019 amounted to 4.8 percent.

Malaysia is also experiencing the same thing, the economic growth of the highest there in the year 2010 at 7.4%, and the lowest in 2016 at 4.4%. Singapore as a developed country experience the same thing as 3 states earlier, the decline in economic growth from the years 2010-2019. The growth of the economy most high occurred in the year 2010 amounted to 15.2% and low in 2015 at 2.2 %.



**Figure 1.** Economic Growth (%) from 4 ASEAN countries

Source : Data Processed, 2021

Based on these problems, this study uses independent variables, namely, export, import, literacy rates, life expectancy at birth, and the visit of tourists. The independent variables used in this study have an influence on economic growth, based on the theory of Hecksher-Ohlin said that international trade between countries is needed to complement every need in each of these countries.

A country that has abundant resources will export to a country that requires that both countries to export and import activities can be mutually beneficial so that it can boost the economic growth in every country. Then the theory of Human Capital, states that human

resource is the main capital to cultivate existing resources to achieve maximum production. For processing, resources are required, human resources quality and good health so that it can maximize existing resources in the state proficiency level, literacy rate, and life expectancy at birth is an overview of the quality of human resources in a country.

In general, to assess the quality of human resources in a country is proxied by the human development index but in this study, the quality of human resources is proxied by literacy rates and life expectancy at birth. The selection of the literacy rate and life expectancy at birth in this study is constituted to be more specific to research about the influence of the quality of education and the quality of health of a country's economic growth. Then visit's to a country can affect the economic growth of a country, because the demand for goods and services of tourists in a country can increase employment and increase the income of the community so that it can increase the consumption of the community and give influence positive to economic growth.

Economic relations between the countries have a very important role because each country can complement the needs of each country. To complement the needs of the countries will do the export and import transactions which will affect the balance of payments of a country. According to Mankiw (2012) increase in the economic growth of a country can be said to be due to the growth of the real GDP of a country in a given year shows an increase in the per capita income of a country.

The growth of the economy will increase if there is an increase in revenue of the state in which a country's exports are higher than

imports in the country. The value of exports net negative means that the goods or services produced by the country are less attractive to other countries that export less than imports. The value of exports is higher than the import should be able to improve the economy of the community.

According to Bakari and Mabrouki (2017) the trading activity in the economy occurs because of the presence of the advantages of resources of the country, so the output will boost the economy of the country. Imports that are getting steeper in a country can be caused by the scarcity of raw material resources to be processed or the low quality of goods produced domestically so a country must import to meet domestic needs. The quality of low production caused by the quality of human resources is low so that the goods and services that are in production can not meet the needs of the country. According to Todaro (1995) human resource is the main foundation for a country that is prosperous.

The quality of human resources is marked by high rates of literacy in the country. The higher the literacy rate of a country will produce a high quality of human resources in the country. The selection of variables, the literacy rate in this study is caused by the foundation of the early to the quality of the HDI in a country derived from the literacy rate which is becoming one of the indicators, if the literacy rate of a country increases every year then it will improve the quality of IPM in the country as well. This is what makes the reason for the selection of the literacy rate in this study.

Human resources are one factor that is very influential on the economic growth of a country because of the human resources process

a variety of natural resources for the state of such quality human resources will certainly have a positive effect on the economic growth of a country. The high and low human resource of a country is determined by the factors of health, education, and per capita income of the country.

According to Chambers (1995) in Risfiani (2016) poverty refers to a lack of physical health that can be seen in the income of the country. Bad health in a country will affect the life expectancy at birth in the country. The higher the life expectancy at birth in a country means that the country has prosperity rate high also. Human resources have the most important role in processing the resources that exist in a country, either for processing or producing goods and services.

The state that has the potential of nature to the tourism sector has more advantages to promote the economy in the country, for it is human resources that have good ethics can be one of the reasons tourists come traveling to the country. The tourism sector is one sector that is very influential on the economic growth of a country because tourism sector affects the foreign exchange earnings of the country. The purpose of this study is to analyze the influence of export, imports, literacy rates, life expectancy, and tourist visits on economic growth in the four ASEAN from 2010 to 2019.

**RESEARCH METHODS**

This research uses a descriptive research type is quantitative. Analysis tools used to process the data in this research is regression analysis of panel data (pooled data) which uses a combination of data time series data and cross-section data and time series, i.e. years 2010-2019

and cross-section data that consists 4 ASEAN countries, namely Brunei Darussalam, Indonesia, Malaysia, and Singapore. Based on the theories and the study of previous research that became the basis of the framework of thinking then the regression analysis in this study focuses on the influence of five main variables on economic growth in four ASEAN countries. Therefore, the following panel data regression in this study:

$$Y_{it} = b_{0it} + b_{1it} X_{1it} + b_{2it} X_{2it} + b_{3it} X_{3it} + b_{4it} X_{4it} + b_{5it} X_{5it} + e_{it} \dots \dots \dots (1)$$

Information:

- Y : PE (Economic Growth)
- b : Fetanta
- b<sub>1it</sub>, b<sub>2it</sub>, b<sub>3it</sub>, b<sub>4it</sub>, b<sub>5it</sub> : Regression Coefficient
- X<sub>1it</sub> : Independent Variable 1 (Export)
- X<sub>2it</sub> : Independent Variable 2 (Import)
- X<sub>3it</sub> : The Independent Variable 3 (Literacy rate)
- X<sub>4it</sub> : The Independent Variable 4 (Life Expectancy at Birth)
- X<sub>5it</sub> : The Independent Variable 5 (Tourist arrivals)
- e : Error Term
- i : 4 ASEAN member countries
- t : Years (2010-2019)

The sources of data in this research is from the official website of the ASEAN Statistical Yearbook 2020. Data collection techniques used in this research use secondary data, where the data used in this research is taken or obtained through the website so there is no need to come to the agency to which it relates.

To determine the effect of the variables of export, import, literacy rates, life expectancy at birth, and the visit of tourists to economic growth in 4 ASEAN countries, this study uses a quantitative descriptive method and uses the method of regression analysis of panel data. According to Gujarati and Porter (2012:235) that the panel data (Pooled Data) is the joint between the data chipset time (cross-section) and the data time series (time series).

## RESULTS AND DISCUSSION

The results of this study indicate of the influence of exports on economic growth is associated with negative and statistically has no significant influence on economic growth in 4 ASEAN countries. The results of this study have the same results as the research conducted by Kartikasari (2017) the results of the research prove that the export of interconnected negative and has no significant effect on the growth of the economy in the Riau Islands.

Kartikasari stated that many countries are too focused or paying attention just on some kind of commodity export value profit more so ignore export commodity of the other, which can provide added value to provide more revenue to a country. The results of this study have results that are not in line with the research conducted by Okyere and Jilu (2020), the results of the study concluded that export-related positive and significant effect on economic growth.

The export performed by a country can increase economic growth because of income or results from the activities of the export can be used to build infrastructure in the country. The facilities and infrastructure built by the state can be maximized by the public then it can help

people to show the production capability is better again. The relationship is negative and not significant export on economic growth in 4 ASEAN countries is an overview of the export quality in 4 of the country.

Export results that are not qualified leads can not compete in the international market. To not be competitive export quality 4 ASEAN countries this resulted in the influence of export on economic growth to be not significant. The influence of the import on economic growth is positively related and statistically has a significant effect on economic growth in four ASEAN countries.

Research has the same result as previous research conducted by Zang and Baimbridge (2012), the results of these studies have results that imports have a relationship that is positive and influential significantly to economic growth. It was described that a country that imports materials for production due to natural resources are inadequate, the import is done to support the production in the country so it can help drive the economy in the country.

The results of this study are not in line with the research conducted by Kartikasari (2017), the study concluded that the import of associated negative and not significant to economic growth. It is caused by when a country imports it means buying goods from overseas manufacturers so that the import is done removing the money from the state itself, the more the money spent for the needs of the import it will give bad results to economic growth.

The relationship is positive and significant influence between the variables of imports and the growth of the economy is an effort of a country to improve the economy in the country.

The import is carried out by a state to meet the needs of raw materials for the activities of material production in the country, when a country increases capacity of imports of a commodity to be processed back in the country than most likely will affect economic activity in the country because it would require the amount of labor so that people have an income and have the capital to be consumed.

The influence of literacy rates on economic growth is associated negative and statistically has a significant effect on economic growth in 4 ASEAN countries. The results of this study have results that are in line with research conducted by Desai (2012), who concludes that the literacy rate has a negative relationship and significant effect on economic growth. When the literacy rate of a country is improving it will provide a positive influence on the human resources in a country.

The quality of human resources will have the ability to produce goods and services by utilizing the existing resources in the country well. The study has results that are not in line with Wahyuni (2019), the results of the study concluded that the literacy rate has no significant effect on economic growth. It caused that economic growth can not be produced or shown by literacy rates, but can be influenced by socio-economic circumstances in the country.

Figures literacy has a negative relationship and significant influence on economic growth, it resulted when the literacy rate in a country is increased, it can reduce economic growth in a country. Figures literacy is the ability to read and write community in a country, when a country focus on the development of literacy rates, the allocation of funds used focused on the costs of overcoming the problem of illiteracy in

the country, resulting in the other sectors have limited funds to be used in the sector. The influence of life expectancy on economic growth is associated with negative and statistically influence significantly on economic growth in four ASEAN countries.

The study has results that are in line with research conducted by Munawaroh and Haryanto (2021), the study concluded that life expectancy at birth is associated negative and significant impact on economic growth. The human resources who have good health will give you the ability to work which may affect economic growth. The result that not consistent with Gurler and Ozsoy (2019) who concluded that life expectancy at birth has a positive relationship and significant influence on economic growth.

This is due to the increase in life expectancy at birth in a country explained that the repair or improvement of the quality of health in the country can prevent or reduce the rate of death in the country so as to encourage residents to have an average life expectancy that long when they are born and have a workforce that is able to boost productivity in the country and to increase its economic growth.

Numbers life expectancy at birth has a negative relationship and significant influence on the growth of the economy it is caused when a country focuses on the development of the health sector so that the cost of funds used focused to improve health facilities and infrastructure in the country. As a result of the focus on countries in the field of health, it will result in disruption of the use of funds to other sectors that should be used to the maximum.

The current process of improving the quality of human resources through health not to have an impact on increasing economic

growth but is still in a period of lower economic growth. The influence of tourist arrivals on economic growth is associated negative and statistically has no significant influence on economic growth in 4 ASEAN countries.

Research has the same results as the research that has been done before by Rediteani and Setiawina (2018) in which the study concludes that the visit of the tourists does not affect economic growth. This is due to the many factors that affect the interest wisatawan to visit a country in terms of security, health, the condition of the state, and other factors so you do not have the interest to visit. A state that has security, and good health will increase the interest of tourists to visit and vice versa.

The study has results that are not in line with the research conducted by the Suastika and Yasa (2017), the study concluded that the reason is a positive and significant effect on economic growth. This is the amount of foreign and domestic tourists visiting a country that can improve the welfare of society. Consumptive activities conducted provide income to the community around which the income is to use the community to meet its needs so it can drive the economy of a country.

The relationship is negative and not significant between tourist arrivals to economic growth, visit low in a country can be caused by the condition of that country better than the condition of public health, the natural conditions that can affect the interest of tourists to berkunjung to the country. If a country has relatively good health and natural conditions of minimal disaster then it can increase tourist visits to the country. Then the rate of consumption of low tourist attractions can result in the income of people who have jobs in the

tourist areas being relatively low so that the level of public consumption is reduced and the effect on the decline in economic growth.

## CONCLUSION

Based on the results of processing the data and discussion of this research are to analyze the influence of export, import, literacy rates, life expectancy at birth, and the visit of tourists to economic growth in four ASEAN countries in the years 2010-2019, it can be concluded that the export associated negative and statistically has no significant influence on economic growth in 4 ASEAN countries in the years 2010-2019.

The Imports are positively related and statistically have a significant effect on economic growth in 4 ASEAN countries in the years 2010-2019. The literacy rate has a negative relationship and statistically has a significant effect on economic growth. Life expectancy at birth has a relationship that is negative and statistically has a significant effect on economic growth. The tourist visit is associated with negative and influence is not significant to economic growth in four ASEAN countries in the years 2010-2019.

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