FDI Led Growth Hypothesis and Export Led Growth Hypothesis in ASEAN

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Abstrak

Pertumbuhan ekonomi merupakan salah satu indikator kinerja perekonomian suatu negara, oleh karena itu pertumbuhan ekonomi yang memiliki kinerja yang baik mendorong pembangunan ekonomi berjalan dengan baik sehingga masyarakat semakin sejahtera. Penelitian ini bertujuan untuk mengkaji dan menganalisis peran FDI dan ekspor terhadap pertumbuhan ekonomi di ASEAN. Metode penelitian yang digunakan adalah panel kausalitas dengan periode penelitian 2010-2020. Panel kausalitas yang digunakan dalam penelitian ini mengetahui bagaimana hubungan antara FDI, ekspor, dan pertumbuhan ekonomi di ASEAN. Hasil estimasi menunjukkan hubungan searah antara FDI terhadap pertumbuhan ekonomi, dan ekspor terhadap pertumbuhan ekonomi. Oleh karena itu, hipotesis pertumbuhan yang dipimpin oleh FDI dan pertumbuhan yang dipimpin oleh ekspor dapat diterima. Rekomendasi yang diberikan kepada masing-masing negara adalah diharapkan pemerintah kawasan ASEAN lebih memfasilitasi perizinan penanaman modal asing melalui deregulasi yang mempersulit investor asing. Rekomendasi terkait ekspor, pemerintah masing-masing negara ASEAN perlu memetakan ekspor potensial dan non-potensial, jika ekspor potensial ditingkatkan, sedangkan yang non-potensial perlu inovasi, seperti inovasi produk dan inovasi pemasaran digital.

Kata Kunci: FDI, Ekspor, Pertumbuhan Ekonomi, ASEAN, Panel Kausalitas

Abstract

Economic growth is one indicator of a country's economic performance, therefore economic growth that has good performance encourages economic development to run well so that people are more prosperous. This study aims to examine and analyze the role of FDI and exports on economic growth in ASEAN. The research method used is a causality panel with a research period of 2010-2020. The causality panel used in this study detects how the relationship between FDI, exports, and economic growth in ASEAN is. The estimation results show a unidirectional relationship between FDI to economic growth, and exports to economic growth. Therefore, the hypothesis of FDI led growth and export-led growth is acceptable. The recommendation given to each country is that it is hoped that the governments of the ASEAN region will further facilitate foreign investment permits by means of deregulation that makes it difficult for foreign investors. Recommendations related to exports are that the governments of each ASEAN country need to map potential and non-potential exports, if potential exports are increased, while non-potential ones need innovation, such as product innovation and digital marketing innovation.

Keywords: *FDI, Exports, Economic Growth, ASEAN, Causality Panel*

Background

One of the often analyzed empirical research samples is ASEAN economic growth. The ASEAN region is one of the centers of promising economic growth for the world economy. This is because it has the potential for economic wealth, both natural resources and human resources, so it becomes a strategic area (Brueckner et al., 2018). This potential makes the ASEAN region one of the priorities of investors in investing in various economic sectors so that it becomes a force to encourage economic growth (Nasir et al., 2019).

Economic growth in ASEAN is driven by export performance. Exports are considered the first and most important step towards accelerating economic growth. Post neoclassical theory is known as endogenous economic growth theory which explains that exports have a positive influence on output and economic growth (Love & Chandra, 2005). Furthermore, (Goh et al., 2017) suggests that the relationship between exports and economic growth is referred to as export-led growth. Exports do not depend on conditions at home, but instead, affect the income of people abroad. Exports, especially net exports, can affect a country's Gross Domestic Product (GDP). An increase in exports will increase net exports, which of course will increase GDP at the same time.

Table 1 shows that the average contribution of FDI to GDP formation in ASEAN is 8,3 percent per year. The high average value was contributed by the countries of Singapore and Cambodia. Table 1 shows that there are 8 ASEAN member countries that have an average FDI contribution to GDP below ASEAN. It is necessary to increase the contribution of FDI because the presence of FDI can encourage economic growth.

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Table 1 . Average Contribution of FDI to GDP in 2012-2020

Country	FDI (%GDP)
Brunei Darussalam	3,0
Indonesia	2,0
Cambodia	12,7
Laos	6,5
Myanmar	4,1
Malaysia	2,9
Filipina	2,1
Singapura	22,9
Thailand	1,7
Vietnam	4,6
ASEAN	**8,3**

Source: World Bank

The export-led growth hypothesis theory emerged on the basis of the comparative advantage trade theory, The export-led growth hypothesis assumes that export expansion is a key factor in increasing long-term economic growth (Love & Chandra, 2005), Export expansion can promote the specialization of domestically produced export products, thereby causing a reallocation of resources from the inefficient non-traded sector to a higher productive export sector, Reallocation of these resources can increase productivity levels, increase income, and lead to more encouraging economic growth (Tang et al,, 2015), The export expansion helps to concentrate investment in these sectors, which in turn increases the total productivity of the economy as a whole and encourages economic growth (Ee, 2016),

Furthermore, the performance of economic growth in ASEAN countries is influenced by foreign direct investment inflows, Investment activities, especially FDI inflows, can increase the economic growth of ASEAN countries, FDI inflows can be attracted to domestic countries by improving the investment climate (W, Li et al,, 2020), For domestic countries, capital inflows include additional sources of funding for domestic investment projects in poor countries with low savings, and the possibility of risk diversification (Pegkas, 2015), Therefore, FDI inflow is expected to increase productivity, which is increased production will encourage economic growth,

A large number of FDI inflows for ASEAN member countries can create a wider market and create job opportunities for local workers as well as technological and expert assistance so as to encourage increased funding needs and accelerate ASEAN economic growth (Crescenzi et al,, 2021), The presence of incoming investment will encourage the creation of new capital goods so that it will absorb new labor production factors which in turn will accelerate ASEAN economic growth, so each country tries to create a climate that can stimulate investment, especially private investment, FDI brings significant benefits to the economies of each ASEAN member country (Thangavelu & Narjoko, 2014),

The FDI-led growth hypothesis believes that foreign direct investment can lead to an increase in the gross domestic product (Yalta, 2013), FDI-driven growth or FDI-led growth hypothesis requires market size growth to attract foreign direct investment, This hypothesis is built based on growth theory where foreign direct investment is one of the determinants of output growth (Crescenzi et al,, 2021), The impact of foreign direct investment on the recipient country's economy is analyzed in the context of its effect on growth drivers such as human capital, exports, and technology (Pegkas, 2015), In addition, the foreign direct investment will encourage the export of the recipient country and help companies in the recipient country to increase access to international markets,

Sumiyarti (2015) conducted a study aimed at testing whether the “export-led growth” hypothesis applies to the Indonesian economy, The results of statistical tests can show that the alleged "export-led growth" hypothesis applies in Indonesia is acceptable, Keong, Yusop, and Khim Sen (2005) tried to test the export-led growth hypothesis in Malaysia, The estimation results of the research by Keong, Yusop, and Khim Sen (2005) shows that exports are the cause of economic growth, Thus, this study proves that the export-led growth hypothesis is valid for the Malaysian economy,

Dada & Abanikanda (2021) conducted a test of FDI-led growth in Nigeria, The estimation results show that FDI does not have a positive impact on Nigeria's economic growth, That is, FDI is only an illusion to encourage economic growth, Dinh et al,, (2019) conducted a study on the impact of FDI on economic growth in developing countries, The estimation results show that FDI can stimulate economic growth in developing countries, Susilo (2018) conducted research on the relationship between FDI and economic growth in the United States, The results show that not all forms of foreign investment are beneficial to the host economy, That is, there are some sectors that have a positive correlation to economic growth and some have a negative effect on economic growth in the US,

Ee (2016) conducted research on export led growth in Sub-Saharan Africa (SSA), The results of Ee's research (2016) show that export led growth applies in Sub-Saharan Africa (SSA), Kalaitzi & Chamberlain (2021) demonstrated export led growth in GCC countries, such as Bahrain, Kuwait, Oman, Saudi Arabia and the United Arab Emirates, The results provide evidence to support the validity of the ELG hypothesis in the short term for the UAE, while the opposite is true for Bahrain, Moreover, there is a bidirectional causality between exports and growth in the case of Kuwait, In the long term, the validity of the ELG is confirmed in the case of Bahrain, while economic growth leads to exports in the case of Kuwait and Saudi Arabia,

Literature Review

Foreign Direct Investment

Foreign Direct Investment (FDI) is the provision of loans or purchases of company ownership outside the territory of their own country. This lending or purchase of ownership can occur in management, joint ventures, technology transfer and transfer of experts.

Foreign Direct Investment includes investment into tangible assets in the form of purchasing land for production purposes, establishing factories, providing various types of capital goods, purchasing various types of inventory equipment and others along with managing various management functions, as well as the funds that have been invested by investors while maintaining control.

Export

Export activity is a trading system by releasing goods from within the country to abroad by fulfilling the applicable provisions. Exports are the total goods and services sold by one country to another, including goods, insurance, and services in a given year.

Export activities have several objectives, namely increasing the country's foreign exchange. The existence of export activities is useful for opening new opportunities abroad. These opportunities will foster the expansion of the domestic market, investment, and foreign exchange in a country.

Economic Growth

Economic growth as a process of increasing output from time to time is an important indicator to measure the success of a country's development. The success of a country's development can increase the level of community welfare. The higher the economic growth of a country, the better the economic development, so the more prosperous the community.

Economic growth is the key to macroeconomic goals. This statement is based on three reasons. First, the population is always growing. Second, as long as wants and needs are always unlimited, the economy must always be able to produce more goods and services to satisfy those wants and needs. Third, efforts to create economic stability through income redistribution will be easier to achieve in periods of high economic growth.

Export Led Growth Hypothesis

Export promotion strategies are often in line with the principle of comparative advantage when a country specializes in a product, so that it can produce competitively (Goh et al., 2017), Thus, goods become available to the people of the world at lower prices, This can expand market share, so that income and employment levels increase domestically, As a result, the process of economic development can be facilitated, In short, more emphasis on export promotion will allow optimal allocation of world resources (Zhou et al, 2022), Therefore, the returns from the trade sector depend on the acceleration of export growth, Export led Growth is based on the views of classical economic theory and neoclassical economic theory, According to this theory, exports are the main determinant of economic growth, This can be explained as an increase in exports which leads to increased employment in export-based industries and this increase leads to higher productivity, which in turn leads to increased economic growth,

Over the past thirty years, development policy has been dominated by an export-driven growth paradigm, This paradigm is part of the consensus among economists about the benefits of economic openness (Love & Chandra, 2005), This consensus has been used to justify globalization, The export-driven growth paradigm came to prominence in the late 1970s when it replaced the import substitution paradigm that had dominated development policy thinking (especially in Latin America) in the thirty years following World War II, Export-driven growth is a development strategy aimed at growing productive capacity by focusing on foreign markets (Tang et al,, 2015), This is part of the new consensus among economists about the benefits of economic openness that occurred in the 1970s (Ee, 2016), According to economists, export-driven growth produces mutually beneficial outcomes for developing and industrialized countries, All benefit from the global application of the comparative advantage principle while developing countries benefit extra from an external focus (Gokmenoglu et al,, 2015), Moreover, industrial economies should benefit even if developing countries subsidize their exports to win additional exports, This is because countries that subsidize their exports give gifts to countries that receive these exports (Lim & Ho, 2013).

FDI Led Growth Hypothesis

Foreign direct investment (FDI) is one of the best forms of capital in the financing and investment of industrial projects, There is a promising trend in global foreign direct investment (FDI) inflows for developing and transition countries, Every year more and more FDI flows not only from developed countries to developing countries but also from one developing/transitioning country to another (Li et al., 2020). The demand for FDI has increased rapidly especially during the last three decades, The decreasing number of official loans from international financial institutions and assistance from developed countries has further increased the demand for FDI in least developed countries (Tan et al., 2021), FDI in developing countries has increased significantly over time, its distribution characterized by great variation between and within different regions of the world (Pegkas, 2015), Foreign direct investment (FDI) is widely accepted as a component to drive the country's economic growth (Pal et al., 2022), The importance of FDI for economic growth is much higher in developing countries than in developed countries (Thangavelu & Narjoko, 2014), This is due to the inability of developing countries to generate internal savings for investment needs, In addition, the entry of foreign direct investment is one of the most effective so that the economy of developing countries is integrated with other countries in the world, because it not only provides capital but also technology and knowledge (Kundan and Gu, 2010), A brief description is that the positive impact of FDI on economic growth is driven by the transfer of knowledge and technology (Yalta, 2013), FDI leg growth is based on the theory of economic growth developed by the Neo-Classical, The theory emphasizes the role of capital owned by a country, Capital sourced from within the country and abroad can help the economy in a country, According to (Crescenzi et al,, 2021), there are two forces that affect the capital stock, namely investment and depreciation, The capital stock is a determinant of economic output that can change from time to time, and these changes can affect economic growth (Pegkas, 2015),

Research Method

The type of research used in this research is exploratory This study is one example of quantitative research, This is because there is a secondary data processing process according to the model compiled using STATA 14 and the estimation results are analyzed, so they use more mathematical calculations, The advantage of quantitative research is that it can be used to measure the interaction of the relationship between two or more variables and simplify the reality of complex and complicated problems in a model, The period used in this study is 2010-2020, There are 10 ASEAN countries used in this study, namely Brunei Darussalam, Cambodia, the Philippines, Indonesia, Malaysia, Singapore, Thailand, Vietnam, Laos, and Myanmar,

The empirical model used in this study consists of a causality panel model and a panel data regression model, The econometric equation is structured as follows:

$$Y_{it} = \beta_1 + \sum_{k=1}^{K} \theta_{1k} Y_{it-k} + \sum_{k=1}^{K} \pi_{1k} x1_{it-k} + e_{1it}$$

$$x1_{it} = \beta_2 + \sum_{k=1}^{K} \theta_{2k} x1_{it-k} + \sum_{k=1}^{K} \pi_{2k} Y_{it-k} + e_{2it}$$

$$Y_{it} = \beta_3 + \sum_{k=1}^{K} \theta_{3k} Y_{it-k} + \sum_{k=1}^{K} \pi_{3k} x2_{it-k} + e_{3it}$$

$$x2_{it} = \beta_4 + \sum_{k=1}^{K} \theta_{4k} x2_{it-k} + \sum_{k=1}^{K} \pi_{4k} Y_{it-k} + e_{4it}$$

Y is economic growth (%), x1 are exports of goods and services (%), x2 is foreign direct investment (%),The type of data used in this study is secondary data, meaning that the data is taken through a credible institution and has been processed, Researchers just take the data directly processed, The data source used in this study is the World Bank website,

The first step is to test the stationarity of the panel data, The panel unit root test was developed by Levin, Lin, and Chu (2002), Unit root testing assumes that each individual unit in the panel has the same AR(1) coefficient, but allows for individual effects, time effects, and possible time trends (Cushman & Michael, 2011), The method used to test the unit root in this study is to use the LLC method (Levin, Lin, and the Chu) which considers the basic specifications of the ADF (Chang, 2012), The panel data unit root test hypothesis is written as follows:

H0: panel data have unit root
H1: panel data has no unit root

If it is statistically significant (probability of LLC is less than 1%, 5%, and 10%) then the conclusion is rejecting the null hypothesis or the data panel does not have a unit root, whereas if the result is not statistically significant (probability of LLC is more than 1%, 5%, and 10%) then the conclusion is to accept the null hypothesis or have a unit root,

The procedure for determining the existence of causality is to examine the significant effect of the x value on the y value, Econometricians claim that causality tests only find "predictive causality," The purpose of panel data causality is to examine whether x can cause, or y can cause x, or whether the relationship between x and y is reciprocal or the relationship between x and y is independent, This means that there is one-way causality, From x to y, there is one-way causality, From y to x, there is no causal relationship between x and y, and there is a two-way causality between x and y.

Result and Discussion

Foreign Direct Investment (FDI) has played an important role in promoting the economic development of developing countries, including ASEAN, Currently, ASEAN countries are competing for foreign investment, so ASEAN countries are aggressively encouraging FDI inflows to accelerate economic growth, The increase in FDI in ASEAN will encourage an increase in ASEAN economic growth, This condition is inseparable from the implementation of the ASEAN Investment Agreement (AIA), therefore ASEAN has committed to strengthening its investment regime, Therefore, FDI in ASEAN can be used as a factor in accelerating economic growth, so ASEAN countries must be able to strengthen the pull factor for FDI (Xu et al., 2019)

One of the ways in which the ASEAN economy accelerates economic growth is by exporting, According to (Lim & Ho, 2013), the development of economic growth and exports in ASEAN member countries is starting to become a concern for world economists, This is because the proportion of the world's economy that initially rested on the United States and the European Union slowly began to be distributed evenly among developing countries, including ASEAN, Therefore, ASEAN countries can implement export promotion strategies to encourage sectors that have a comparative advantage so that they are more productive and can compete in international markets,

The first step in estimating is to do a panel unit root test for all the variables used in this study, The unit root panel is used to detect whether there is a unit root problem or not, If there is a unit root problem, a first difference is done to avoid unit root problems, The following is the estimation result using the unit root panel:

Table 2. Panel Unit Root LLC

Variabel	Prob LLC
Lny	0,0011***
Lnx1	0,0023***
Lnx2	0,0346**

Y is economic growth (%), x1 are exports of goods and services (%), x2 is foreign direct investment (%), ***, **, * is significant 1%, 5%, or 10, Table 1 shows that all variables used in this study are stationary at the level level, Variables of economic growth, FDI, and exports are stationary at the level, it means rejecting the null hypothesis which indicates that the variable is not stationary, thus accepting the alternative hypothesis that is stationary or there is no unit root problem,

Table 3 shows the results of the Granger causality estimation of the panel data, The estimation results show that FDI led growth and export led growth, It can be seen from the direction of the arrow in Table 2, Therefore, foreign direct investment and exports with economic growth have a unidirectional relationship.

Table 3. Panel Granger Causality

Variabel	Prob
x2 → y	0,022**
y → x2	0,713
x1 → y	0,061*
y → x1	0,158

Y is economic growth (%), x1 are exports of goods and services (%), x2 is foreign direct investment (%), ***, **, * is significant 1%, 5%, or 10.

The estimation results using the Granger causality panel show that the FDI-led growth and export-led growth hypotheses in ASEAN are valid. The results of the research by (Ee, 2016) shows that exports are the cause of economic growth, Thus, this study proves that the export-led growth hypothesis is valid for the Malaysian economy, The results of (Lim & Ho, 2013) can show that the alleged "export led growth" hypothesis applies in Indonesia is acceptable, The FDI-led growth hypothesis in ASEAN believes that foreign direct investment can lead to increased economic growth, The FDI-led growth hypothesis causes ASEAN to have to increase the size of the market, because it is a factor to attract foreign direct investment.

Since the implementation of the ASEAN Investment Agreement (AIA), ASEAN has committed to strengthening its investment regime, Under the ASEAN Free Trade Area (AFTA) free flow of investment is targeted as a core step towards achieving a single market and integrated production base, along with free movement of goods, services and capital flows, This can help ASEAN countries attract more FDI and boost economic growth (Yalta, 2013), The ASEAN Comprehensive Investment Agreement or ACIA itself is a revision and a combination of 2 (two) investment agreements previously agreed upon by ASEAN, namely the Framework Agreement on the ASEAN Investment Area (AIA Agreement) in 1998 and the 1998 Framework Agreement on the ASEAN Investment Area (AIA Agreement), ASEAN for the Promotion and Protection of Investment (ASEAN Agreement for the Promotion and Protection of Investment) 1987 known as the ASEAN Investment Guarantee Agreements (ASEAN IGA).

The ASEAN Comprehensive Investment Agreement (ACIA) consists of 49 Articles containing a comprehensive investment or investment agreement in ASEAN which aims to create a free and open investment regime in ASEAN in order to achieve the ultimate goal of economic integration in the ASEAN Economic Community (AEC), in accordance with the Blueprint of the ASEAN Economic Community by taking steps including progressive liberalization of investment regimes in Member States and others, Under the ACIA, a covered investment is an investment made in the territory of that Member State (ASEAN) by an investor from another Member State (ASEAN), whether existing since the entry into force of this Agreement, or established, approved or expanded later, and has been recognized under the laws and regulations and national policies of that Member State, and where appropriate, specifically approved in writing by the competent authority of a Member State.

The export-led growth hypothesis in ASEAN is valid, meaning that ASEAN's export expansion is a key factor in increasing long-term economic growth, Export expansion carried out by ASEAN can promote the specialization of export products produced domestically, thereby causing a reallocation of resources from the inefficient non-traded sector to the higher productive export sector (Gokmenoglu et al,, 2015), Reallocation of these resources can increase productivity levels, increase income, and lead to more economic growth (Ee, 2016), Export expansion helps to concentrate investment in these sectors, which in turn increases the total productivity of the economy as a whole and boosts economic growth.

Concusions and Research Implications

Based on the summary of the research results, it can be concluded that the relationship between exports and economic growth in ASEAN is export-led growth, and the relationship between FDI and economic growth in ASEAN is FDI-led growth, The FDI led growth hypothesis causes ASEAN to have to increase market size, because it is a factor to attract foreign direct investment, The export-led growth hypothesis in ASEAN is valid, meaning that ASEAN's export expansion is a key factor in increasing long-term economic growth, Export expansion carried out by ASEAN can promote the specialization of export products produced domestically, thereby causing a reallocation of resources from the inefficient non-traded sector to a higher productive export sector, The recommendation given to each country is that it is hoped that the governments of the ASEAN region will further facilitate foreign investment permits by means of deregulation that makes it difficult for foreign investors, Recommendations related to exports are that the governments of each ASEAN country need to map out potential and non-potential exports, if potential exports are increased, while non-potential ones need to be innovated,

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