Finding the Gap between Economic Globalization Index and Economic Growth Challenges in Indonesia, Malaysia, and Thailand

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Abstract. The relationship of globalization to economic growth is a topic of debate in the literature on economic growth and development. Several studies have found positive effects of globalization on growth through effective allocation of domestic resources, diffusion of technology, increased factor productivity, and capital gains. On the other hand, others argue that globalization harms growth in countries with weak institutions, political instability, and in countries that specialize in activities that are not effective in the globalization process. This study investigates the gap between economic globalization represented by KOF Index and economic growth in selected ASEAN countries such as Indonesia, Malaysia, and Thailand. It supported a competitive business climate in free trade, reducing barriers and taxes in international trade, attracting foreign investment in line with improving infrastructure, financing exports, and building facilities in the form of infrastructure as a place for business transit and business licensing processes. So that in the absence of easy access in economic globalization, rapid progress in innovation, market opening, and an increase in productive investment can lead to continued economic growth. However, economic openness is accompanied by restrictive policies that protect domestic industries and defense investment policies.

Keywords: Economy Growth, Globalization, KOF Index, Trade Performace

1 Introduction

Globalization is an interesting phenomenon and cannot be separated from people's lives in various parts of the world. This phenomenon is interesting to research because economic systems have become more interconnected between countries.[1], Furthermore, have various opinions in influencing economic growth in a country. Globalization is a process that puts the world's people in reach or connects in all aspects of their lives, whether in culture, economy, politics, technology, and the environment [2].

The benefits of globalization can increase economic freedom and provide access to information, empowering communities and making them authorized regulators of corporate activity, responsibility, and accountability [3]. Globalization results in a process that further unites many countries' economies encourage the global economy, and globalizes economic policies. Globalization is a challenge for almost all countries in the world by demanding more

ICEBE 2021, October 07, Lampung, Indonesia

DOI 10.4108/eai.7-10-2021.2316833

comprehensive economic openness. According to Nowbutsing's (2014) research, openness is a means to promote growth through research and development and broader market access.

The impact of globalization is the rapid liberalization of trade and investment by developed countries to developing countries, including ASEAN countries, such as Indonesia, Malaysia, and Thailand. These three countries have a market share. The dominance in southeast Asia is related to the flow of foreign direct investment. Direct investment flows indicate the country's contribution in attracting investments directly related to the use of factors of production.

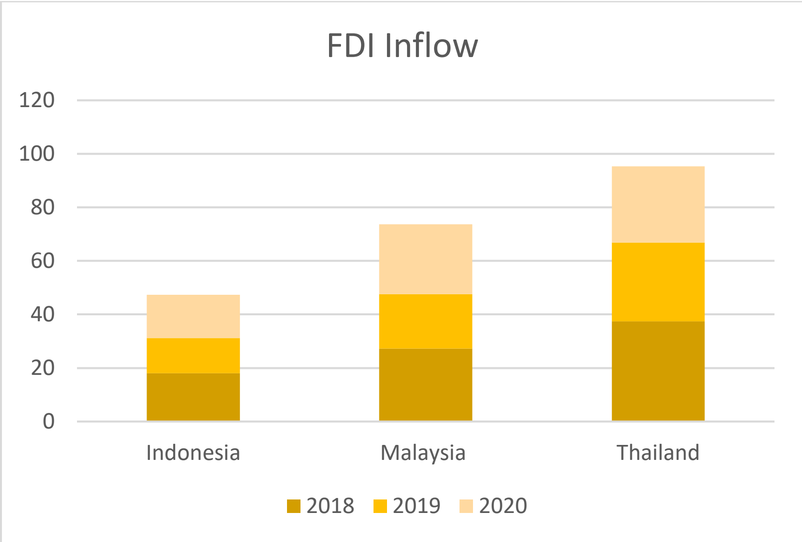

Fig. 1. FDI Inflow in Three ASEAN Countries, 2018-2020 (Source: UNCTAD, 2021)

Based on the picture above, the total flow of foreign investment into Thailand is higher than Malaysia and Indonesia. This is following the strategic position of Thailand as the epicenter of manufacturing production factors in the Southeast Asia region. In addition, in the tourism sector, Thailand develops and opens tourist taps from abroad with various segmentation, ranging from health to rural.

FDI is one of the critical sources of financing for developing countries, including ASEAN countries that are, on average, developing countries. With an immense contribution to development, asset transfer, technology, and managerial skills can boost economic growth. In the theory of economic growth, there are capital accumulation factors that affect economic growth.

Globalization opens up domestic product market opportunities to competitive international markets. Nevertheless, on the other hand, it will open the global product into the domestic so that domestic goods will be more rivaled or less competitive with foreign goods. Domestic goods, especially in developing countries with labor-intensive characteristics, are increasingly abandoned due to the presence of foreign goods produced with high technology, causing low selling prices and domestic goods that cannot compete on a price basis. This leads to declining employment opportunities, increasing unemployment, and poverty rates.

The relationship of globalization to economic growth is a contentious topic in the literature on economic growth and development. Several studies have found positive influences of globalization on growth through effective allocation of domestic resources, diffusion of technology, increased productivity, and capital addition. In contrast, others argue that globalization harms growth in countries with weak institutions, political instability, and in countries that specialize in ineffective activities in the process of globalization.

The level of globalization of countries can be seen from the KOF Globalization Index (KonjunkturforschungsstelleII), first published in 2002 by ETH Zurich. The KOF Globalization Index scale is between 1 to 100. The higher the index value indicates that the level of globalization that occurs in a country is higher. Measuring globalization is not easy because much of its coverage is strongly linked to each other and including everything in a model presents the problem of collinearity, but if one scope is missing from the model, it also raises serious biases.

Economic globalization is a process of economic activity and trade, where various countries around the world become market forces and increasingly integrated without barriers or territorial boundaries of each other. Todaro and Smith (2006) suggest that the economic definition of globalization is the increasing openness of a country's economy to international trade, international funds flows, and foreign investment.

Economic globalization is understood by Dreher (2006) as the flow of goods, capital, and services as well as the information and perceptions that accompany market exchange . Some experts argue that globalization is essentially an economic process and can therefore be measured by trade and Foreign Direct Investment (FDI) [4].

The economic success of a country can be determined by economic growth. Because the higher the rate of economic growth, the process of increasing a country's output so that the prospects for a country's development are better. Therefore, this study took on the topic of, "Finding the Gap between Economic Globalization Index and Economic Growth Challenges in Indonesia, Malaysia, and Thailand."

2 Literature Review

a) Economy Growth

According to Todaro and Smith (2006), economic growth is a process of continuously increasing productive capacity in an economy over time, resulting in a level of national income and output that is getting bigger and greater. The three components of economic growth that are important to every society are (1) capital accumulation, including all new investments in land, physical equipment, and human resources through improvements in health, education, and work skills, (2) population growth that ultimately leads to the growth of the labor force, (3) technological advances that are widely interpreted as new ways of getting work done.

Some factors that affect economic growth:

1. Land and other natural wealth
2. The number and quality of the population and labor
3. Capital goods and technology levels

b) Economic Globalization

Economic globalization is a process of economic activity and trade in which various countries worldwide become market forces and are increasingly integrated without barriers or territorial boundaries of each other. Economic globalization is closely related to free trade. In the KOF Globalization Index, economic globalization is measured by variable indicators of trade openness (50%) consisting of trade activities of goods and services seen from exports and imports and the diversity of trading partners.

The globalization of sub-dimensional trade openness includes variables that measure the exchange of goods and services over long distances. The Swiss Economic Institute uses the number of exports and imports of goods as a share of GDP, exports and services imports as part of GDP, and variables that measure diversification of trading partners in trade in goods. Diversification of trading partners is calculated as the opposite of the average Herfindahl-Hirschmann trading partner concentration index for the export and import of goods. The Herfindahl-Hirschmann trading partner concentration index measures companies to industry and indicates the amount of competition between them. The more spread a country trades through different trading partners, the higher the value of the variable.

Then also with the second variable indicator, namely financial openness (50%) consisting of Foreign Direct Investment (FDI), portfolio investment, foreign debt, foreign exchange reserves, and trade balance components. Based on the work of Lane and Milesi-Ferretti (2007), KOF Swiss Economic Institute includes the variable number of foreign direct investment stocks and liabilities as a share of GDP, the number of assets and investment obligations of international equity portfolios as a share of GDP, the number of shares in and out of international portfolio debt securities and bank loans and deposits as part of GDP and international reserves excluding gold as a share of GDP. As the sole flow variable, it includes payment and receipt of primary income as a share of GDP. Furthermore, it consists of income and payments arising mainly from providing labor and capital across borders. According to Todaro and Smith (2006), economic growth is a process of increasing

Table 1. Approach De facto KOF Economic Globalization

Indicators and Variables	Weight (%)
Trade Globalisation (50.0)	
Trade-in goods	38.5
Trade-in services	45.1
Trade partner diversity	16.4
Trade agreements	23.5
Financial Globalisation (50.0)	
Foreign direct investment	27.3
Portfolio investment	16.9

International debt	25.7
International reserves	3.2
International income payments	26.9

3 Research Methodology

This method is used because the data panel is a combination of two types of data, time series, and cross-section, that can provide more data so that it will produce a greater degree of freedom and by using panel data can overcome the problem omitted-variable [5].

Data is sourced from ETH Zurich and the World Bank. The variables used in this study are summarized in the table as follows:

No	Variable Name	Symbol	Period	Unit	Data Source
1.	Economy Growth	EG	Yearly	Percentage	*World Bank*
2.	Economic Globalization	ECO	Yearly	Percentage	ETH Zurich
3.	Government Expenditure	GOV	Yearly	Percentage	*World Bank*

To obtain a general picture of the results of this study and in the framework of testing hypotheses as a temporary answer to the solution of the proposed problems can be seen through the equation of function:

$$EG = \beta_0 + \beta_1 ECO_{1t} + \mu$$

where:

EG = economic growth (percent)
ECO = economic globalization (index)
t = 1, 2, . . . t, showing the dimensions of the time demand (*time series*)
β_0 = constant
β_1 = regression coefficient to economic growth
μ = error term

Estimation using the method Random Effect Model (REM). Method Random Effect Model (REM) uses a variable approach to distraction (error term) to find out the relationship between cross-individual and time-in-time [6]. This tends to see changes between individuals and between times. The previous modeling was the Fixed Effect Model with an extras dummy variable. It can reduce the number of degrees of freedom (degree of freedom) which ultimately reduces the efficiency of the estimated parameters. So the REM method comes with perfecting the FEM model [5]. Rem model equation as follows [7] :

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \mu_{it}$$

By treating β0 as fixed (fixed), we assume that constants are random variables with average values β. Moreover, constant values for each unit across individuals (cross-section) it can be written as follows:

$$\beta_0 i + \varepsilon_i i = 1, 2, \ldots N$$

Where μit is a random error term with zero average value and variation is β02μ (constant). Essentially, we want to say that all the individuals who entered the sample were taken from a larger population, and they had the same average value for constants (β0), and the individual differences and constant values of each individual will be reflected in the error term (μi). Thus the equation Random Effect Model (REM) can be re-written to:

$$Y_{\text{it}} = \beta_{0i} + \beta_0 X_{1\text{it}} + \beta_0 X_{2\text{it}} + \varepsilon_i + \mu_{\text{it}}$$

$$Y_{\text{it}} = \beta_{0i} + \beta_0 X_{1\text{it}} + \beta_0 X_{2\text{it}} + w_{\text{it}}$$

where

$$w_{\text{it}} = eit + \mu_i$$

4 Discussion and Findings

Based on World Bank Data (2021), the average economic growth in selected ASEAN countries is 5.702 %. The highest economic growth was in Thailand, with the highest figure reaching 7.513%, while the lowest at 0.84%, was also in Thailand. Economic globalization has an average index of 66.47 from selected countries in ASEAN. Economic globalization reached the highest index of 83.78 in Malaysia, while Indonesia's lowest index of 37.50.

Table 2. GDP Growth in ASEAN Countries, 2013-2020

Country	2013	2014	2015	2016	2017	2018	2019	2020
Malaysia	7.42	5.29	5.47	4.69	6.01	5.09	4.45	5.81
Thailand	7.51	0.84	7.24	2.69	1.08	3.13	3.43	4.07
Indonesia	6.22	6.17	6.03	5.56	5.01	4.88	5.03	5.07

Putri (2019) stated that trade openness has a significant effect on economic growth in ASEAN. Leitao and Carles (2012) stated that international trade has a positive relationship to economic growth. Putri (2019) stated that trade openness has a significant effect on economic growth in ASEAN.

The components of financial disclosure consist of FDI (27.3%), portfolio investment (16.9%), foreign debt (25.7%), foreign exchange reserves (3.2%) and balance of payments (26.9%). One of the measures of financial openness is Foreign Direct Investment (FDI). FDI is one of the critical sources of financing for developing countries, including ASEAN countries, which are average developing countries. Transfer of technology, supply of absorbed human resources, research and innovation, improvement of management skills and capacities, job opportunities, etc., are the benefits of FDI to the country where it is invested.

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