The Effect of Foreign Direct Investment on Sustainable Development ASEAN 3 and ASEAN 5: A Conceptual Study

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Abstract: Sustainable development is part of ASEAN 2025 vision. It is actively debated amongst ASEAN leaders due to the economic fluctuation, increasing in environmental pollution and wide income gap in ASEAN countries that can hinder the achievement of sustainable development. Therefore this study tries to analyse three indicators of sustainable development which are economic, environment and income distribution and the effect of foreign direct investment on these three indicators between ASEAN3 (Cambodia, Laos and Vietnam) and ASEAN5 (Malaysia, Indonesia, Philippines, Thailand and Singapore) based on the different levels of economic growth. Foreign direct investment is expected to have a different impact on the three indicators of sustainable development due to the different economic levels between ASEAN 3 and ASEAN 5. Previous researches have failed to show a consistent relationship between foreign direct investment and the three indicators of sustainable development. Moreover previous researches mostly looks at the effects of foreign direct investment on each individual indicator of sustainable development separately, but very little is done comprehensively by looking at the effects of foreign direct investment on all three sustainable development indicators. Especially on the comparative impact on ASEAN 3 and ASEAN 5. This paper is based on extensive literature. It is expected to prove that the dominant effect of foreign direct investment towards sustainable development and the effect might be different between ASEAN3 and ASEAN5 countries. Future studies should validate empirically the proposed research framework.

Keywords: sustainable development, FDI, economic, environment qulity, income inequlity

1. Introduction

(Commission on Environment, 1987) has stated that "sustainable development (SD) is a development that meets current needs without affecting the ability of future generations to meet their needs". (Summit on Sustainable Development, 2002) outlines three important indicators that are fundamental to SD: social, environment and economic. SD is one of the key agenda for ASEAN leaders because it is a part of ASEAN vision 2025. Issues of global warming are not only globally, but also at ASEAN level can be stunted to achieve SD. The release of carbon dioxide (CO2) is the most important contributor to global warming and climate change (Watson *et al.*, 1997). (Birol, 2015) said ASEAN contributed to CO2 emission of 4% in 2013 and it is expected to double in 2040. A study by (Rasiah *et al.*, 2016), said that if there is no optimum policy and action to be taken, then the cumulative cost of damage due to climate change to ASEAN will reach RM40.1 billion from 2010 to 2110. (OECD, 2013) also gives a serious concern on the issues of income distribution gap that seems increasing over time.

In order to achieve SD, it is necessary to examine the determinant factors of SD and one of them is foreign direct investment (FDI). It is according to (Unctad, 2014) which believes that FDI has great potential to achieve SD. It is also supported by previous studies showing a shift in perspective between policy makers in the country which examined in promoting and attracting more FDI inflows to create opportunities and assist developing countries to achieve SD (Erdal and Tatoglu, 2002; Cassidy and Andreosso-O'Callaghan, 2006).

Therefore, this study is carried out by analyzing previous studies in order to determine the effects of FDI on three SD indicators namely social, environment and economic, specifically on ASEAN 3 and ASEAN 5. The proposed study will be conducted by dividing ASEAN countries into two groups based on the level of ASEAN 3 (Vietnam, Cambodia and Laos) and ASEAN 5 (Malaysia, Thailand, Indonesia, Singapore, and Philippines) according to different levels of economic (Xaypanya, Rangkakulnuwat and Paweenawat, 2015). Due to different levels of economic, thus the effects of FDI on these SD indicators might also be different.

Previous studies have failed to show a consistent relationship between FDI and these three indicators of SD, thus, it requires a further study to investigate more details on this relationship. Furthermore previous studies also look at the effects of FDI on each indicators of SD separately, but very little research is made by looking at the effects of FDI with all these three indicators of SD comprehensively. Moreover, this study might also examine the comparative impact on ASEAN 3 and ASEAN 5.

2. Literature Review

2.1. Foreign Direct Investmen and Economic Growth

In recent study by (Sirag, SidAhmed and Ali, 2018) showed that FDI inflows positively effect on economic growth through financial development in Sudan. The study used annual data from 1970 to 2014. Moreover, it is supported by a study from (Ridzuan *et al.*, 2017) which also showed a positive impact between FDI inflows and economic growth in Malaysia based the annual data from 1970 to 2013. Meanwhile a study from (Koroci, 2018)showed a strong positive relationship between FDI inflows and economic growth in Albania. Furthermore, it also showed that FDI would increase investments in export sectors which transfer new technologies, expertise and management and also would increase competition in the market as according to the survey data is from 1995 to 2012. Meanwhile a study by (Gural and Lomachynska, 2017) showed a positive relationship between FDI and economic growth. The study used annual data from 1992 to 2016 for V4 countries (Poland, Czech Republic, Hungary, and Slovak Republic). Likewise, other studies also showed that FDI inflows positively effect on economic growth (Belloumi, 2014; Solarin and Shahbaz, 2015; Iamsiraroj, 2016; Parezanin, Jednak and Kragulj, 2016).

However, a study from (Florence, David and Daniel, 2017) showed that FDI inflows negatively impact on economic growth, exports, inflation and benefits in Nigeria which used annual data from 1984 to 2015. The study is supported by (Chansomphou and Ichihashi, 2011) that showed FDI negatively impacting economic development in Laos. Moreover, the study summarized the negative effects of FDI probably due to the insistense on some sectors of the economy that have been extremely increasing and decreasing over a certain period of time.

Meanwhile a study from (Klasra, 2011)showed that FDI inflows has no significant relationship between economic growth in Turkey and Pakistan and the studies used annual

data from 1975 to 2004 that were supported by previous studies(Azman-Saini, Law and Ahmad, 2010; Ridzuan et al., 2017).

2.2. Foreign Direct Investments and Environment Quality

A study from (Ridzuan *et al.*, 2017) which used time series data in Malaysia from 1970 to 2013 (44 years) concluded that FDI inflows had a positive impact on the environment quality. Hence the higher the inflow of FDI, the lower the pollution in the country as the quality of pollution is measured through CO2 emissions. This highlight is supported by a study by (Ridzuan *et al.*, 2017) whereby the annual survey data for the Singapore was taken from 1970 to 2013 (44 years). While a study from (Cătălin Voica, Panait and Haralambie, 2015) showed a positive impact on FDI on environmental quality whereby the study used annual data of 28 EU member states for a certain of period since 2000 to 2012. Furthermore, other studies showed positive FDI effects on environmental quality through the transfer of environment-friendly technology from developed countries to less developed countries (Kirkulak, Qiu and Yin, 2011; Leiter, Parolini and Winner, 2011; Al-mulali and Foon Tang, 2013).

Nevertheless, (Kaur, 2013) study was conducted in India showed the opposite effect whereby FDI inflows negatively affect the quality of the environment in which FDI is responsible for increasing CO2 emissions. The study was based on the annual data that was taken in India from 2000 to 2015 (15 years). Moreover, the study was supported by (Behera and Dash, 2017) showed that FDI inflows negatively affect on environmental quality for both high and middle-income countries whereas there is no significant relationdhip between FDI inflows and environment quality for low-income group. (Abdouli and Hammami, 2017) also pointed out that FDI negatively affects the quality of the environment based on selected annual data from 17 selected MENA countries from the period of 1971 to 2013. Moreover other studies also showed the negative effects of FDI on environmental quality(Chakraborty and Mukherjee, 2013; Lau, Choong and Eng, 2014; Omri, Nguyen and Rault, 2014).

Meanwhile the studies from (Jugurnath, Roucheet and Teeroovengadum, 2017) showed that FDI inflows has no significant relationship between environment quality. The study used the data panels from 18 European countries for the period of 1995 to 2013. It is supported by (Shahidan Shaari *et al.*, 2014) through the review data from 1992 to 2012 for 15 developing countries which also showed that FDI did not affect the quality of the environment. Even from other supporting studies which are from (Atici, 2012; Chandran and Tang, 2013).

2.3. Foreign Direct Investments and Income Inequality

In a study by (Ridzuan *et al.*, 2017) which concluded that inflows of foreign direct investment can improve the income distribution for Malaysia, which means, FDI indlows negatively impacts on income inequality. This means that the higher the FDI inflows, the smaller the income distribution gap. It is supported by (Balcioglu, 2018) which concluded that on average, the inflows and outflows of FDI inflows negatively impact on long-term income inequality. However, in the short term the impact of FDI inflows and income inequality is positive. The study used the panel cointegration analysis to show correlation between FDI and income inequality for sample of seven countries (Turkey, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Turkmenistan and Uzbekistan) with annual data from 1992-2012 (21 years). Moreover other studies have also shown a negative impact between FDI inflows and income inequality (Wu and Hsu, 2012; Ucal *et al.*, 2014; Mihaylova, 2015).

Nevertheless a study from (Ngwakwe and Dzomonda, 2018) showed that the increase in FDI inflows had a positive impact on income inequality. The study showed that the increase in FDI inflows had worsened the distribution of income in the country based on annual data taken that were from 2005 - 2015 (15 years). This study is also supported by (Ridzuan *et al.*, 2017) which showed the positive impact between FDI and income inequality in Singapore. While the study from (Cho and Ramirez, 2016) resulted the impact of FDI and FDI stock inflows on income distribution to seven Southeast Asian countries comprising Cambodia, Indonesia, Laos, Malaysia, Philippines, Thailand, and Vietnam which have summed up the increase in FDI inflows will affect income distribution within that group of countries. The study showed that the impact of FDI on income inequality was positive based on annual data taken from 1990 to 2013. Even other past surveys also showed positive effects between FDI inflows and income inequality are (Ahmad and Bahauddin, 2014; Herzer, Hühne and Nunnenkamp, 2014; Munir and Sultan, 2017).

The proposed research framework is developed from extensive review from previous literature and data as seen in figure 1

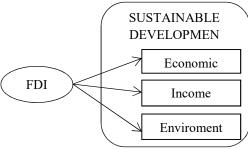


Fig. 1. Research Framework

3. Research Content Analysis

The proposed research framework is developed from extensive review from previous literature and findings. The sources of searching literature and findings are from conceptual and empirical papers of quality journals. Google search and digital library are very helpful medium to access the papers and moreover, the literature and findings were collected from the official website.

4. Discussion And Conclusion

The main objective of the study is to examine the impact of FDI on three SD indicators, namely economic growth, income inequality and environment quality on ASEAN 3 and ASEAN 5. This is due to the different economic levels of both groups of the countries (Xaypanya, Rangkakulnuwat and Paweenawat, 2015). Thus the FDI effects on three indicators of SD are also expected to differ.

Previous studies clearly showed inconsistent results and this encourages this study to be conducted for further investigation of FDI effects on three indicators of SD. Furthermore, only a few studies have been made by looking at the effects of FDI inflows on three indicators of SD especially in a comprehensive study between ASEAN 3 and ASEAN 5. Future studies should validate empirically the proposed research framework. If the proposed framework is validated, the finding of this study is expected to provide useful information to policymakers

from these two national groups in determining the economic openness policy to achieve SD by 2025.

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