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Determinants of Foreign Direct Investment

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Determinants of Foreign Direct Investment

1. Introduction

A foreign direct investment (FDI) is an investment made by a company or entity based in one country, into a company or entity based in another country. According to Demirhan and Masca (2008), FDI has significantly grow due to several factors, namely rapid technological progress, emergence of globally integrated production and marketing networks, existence of bilateral investment treaties, recommendations from multilateral development banks, and positive indication from developing countries that attracts FDI into the country. In other words, FDI has seen to be changing over time due to the response of investors towards the environment for investment.

There are numerous theories which attempt to explain the determinants of FDI in which the theories are noteworthy phases towards the development of a systematic framework for the emergence of FDI. However, the capacity of each to serve as a self-contained general theory, which could clarify all types of FDI has been interrogated in the works of many scholars (Agarwal, 1980; Parry, 1985; Itaki, 1991).

2. Literature Review

A study conducted by Kueh et al. (2010) in the economy of Singapore aimed to investigate factors that influenced the outflow of FDI for a sample period from 1975 to 2007. The empirical findings showed that income has the ability in influencing the outflow of FDI in Singapore. This is because

higher earnings will cause the investment abroad to grow and eventually lead to outflow of FDI from Singapore due to their ability to invest. In addition, Puah et al. (2007) assessed the impact of FDI on economic growth of China towards the ASEAN-5 countries specifically Indonesia, Malaysia, the Philippines, Singapore and Thailand. The cointegration test results exhibited that the economic performance of ASEAN-5 is positively related to FDI of China. Similarly, this can be supported by the findings of Chantasawat et al. (2004) who discovered that FDI flows to China are proven to have implication on the FDI of Asian countries. They indicated that the linkage between the relationships is the production-networking activities among the Asian countries apart from increasing in demand of raw materials as to accommodate the expanding market of China. Due to that, FDI inflow into China may lead to increasing FDI inflow into Asian countries. Hence, it contributed to the economic growth.

Artige and Nocolini (2006) conducted an investigation with the aims to analyze the macroeconomic determinants of FDI inflows by utilizing a sample period from 1995 to 2002. The study was tested for a group of European regions and panel data was adopted in the study. The findings revealed that market size as measured by GDP or GDP per capita is the factors that influenced FDI. Apart from that, Yasmin et al. (2003) studied the volume and factors affecting FDI in developing countries. A sample of 15 developing countries with five each from upper middle, lower middle as well as lower income countries were employed under study. Following panel data model, three approaches, specifically common intercept model, random effects and fixed effects model were used in the empirical analysis. The results showed that urbanization, GDP per capita, standard of living, inflation, current account and wages has significant impact on FDI.

Another study was performed by Kueh et al. (2008) in examining the factors influencing outward FDI in Malaysia by employing few variables, namely income, exchange rate and openness. The quarterly data from 1991Q1 to 2004Q4 were analyzed using Johansen and Juselius cointegration tests as well as the vector error correction model. Further analysis was carried out by Kueh et al. (2009) by including income, exchange rate and openness and interest rate in their empirical estimation for the period of 1991Q1 to 2005Q4. From the analysis, Kueh et al. (2008) and Kueh et al. (2009) discovered that expansion in FDI and trade liberalization enables the Malaysian to benefit from better economic growth, standard of livings, technologies, knowledge as well as skills and ultimately reduce outflow of capital.

Kueh et al. (2007) investigated the relationship between FDI and trade of ASEAN-5 countries by applying annual data from 1971 to 2005. They applied ARDL bounds testing approach in estimating the empirical results. From the empirical evidence, they found that there is a significance relationship between FDI and trade either from the long-run or short-run in ASEAN-5 countries. The study also initiated that most of the major sources of FDI inflow into ASEAN-5 countries were from developed countries such as United States, Japan and European Union. As a result, this reduce the outflow of capital from home country as ASEAN-5 countries are viewed as providing advantage such as low labor cost that lead to lower production cost to the developed countries. Ultimately, this helps to attracts investors and boost economic performance.

Another study carried out by Hoa and Lin (2016) in Indochina, namely Cambodia, Laos and Vietnam economies. The purpose of the study is to examine the role of economic, instructional and political factors in attracting FDI inflows. Therefore, a sample period of 16 years from 1996

to 2012 was applied in the study, whereas panel unit root test and Random effects tests were employed in obtaining the empirical analysis. Through the empirical results, market size, government effectiveness, rule of law as well as political stability appeared to have positive relationship with inward FDI.

Mukhtar et al. (2014) conducted a study aimed at exploring different elements influencing FDI in developing countries, namely Pakistan, India and Bangladesh. The empirical study illustrated that GDP growth rate, inflation rate, tax rate, exchange rate, openness, infrastructure, good governance and political risk can significantly stimulate the flow of FDI towards developing countries. Additionally, this will affect the decision of investors to invest in a country.

By employing ADF unit root test, Johansen and Juselius cointegration test and Granger causality test based on error correction model, Kueh et al. (2014) inspected the association between direct investment abroad of Singapore and few of the determinants under study. Throughout the analysis from 1975 to 2007, the empirical results showed that exchange rate is found to have impact on the abroad investment of Singapore. The reason for this is due to the stability and flexibility of the economy towards external economics shocks that reinforce the currency of Singapore. Consequently, it encourages foreign investment by domestic firms in the long-run and thus, lead to outward FDI.

Furthermore, Puah et al. (2008) used a sample period from 1970 to 2004 in order to analyze the impact of exchange rates changes towards trade balances for ASEAN-5 countries, namely Indonesia, Malaysia, the Philippines, Singapore and Thailand. The empirical evidence illustrated

that exchange rates can stimulate trade balances in the aforementioned countries in the short-run except for Indonesia. Hence, Puah et al. (2008) indicated that a formation of an appropriate exchange rate regime by the government is imperative so as to boost the performance of the economy and improving the trade deficit of the countries. Therefore, this eventually helps to attract investors to invest in the country.

Moreover, Kueh et al. (2009) applied ARDL bounds testing approach in inspecting the relationship between trade openness and government expenditure of ASEAN-4 countries. They applied a sample period of annual data from 1974 to 2006 in estimating the results. From the empirical outcomes, they discovered that increase in trade openness will lead to an increase in the government expenditure. In short, trade openness is positively related with government expenditure of all the ASEAN-4 countries in the long-run. Besides that, Kueh et al. (2009) also pointed out that the government spending plays an important role reducing the risks and to protect the infant domestic industry as the trade becomes more liberalized. Therefore, FDI outflow from a country can be lessened as government involvement plays a role as stabilizer in the economies.

Puah et al. (2012) examined factors affecting capital flight in Malaysia by engaging into ADF unit root test, Johansen and Juselius cointegration test and vector error-correction modelling. Time series data from 1991Q1 to 2008Q4 were tested for FDI, stock market, real GDP, budget deficit and interest rate. The findings revealed that there is an existence of long-run link between the variables under study. Both FDI and stock market were found to have positive implication on capital flow. In contrast, real GDP, budget deficit and interest rate were negatively linked to capital

flight. In addition, real GDP, interest rate, and budget deficit were able to Granger caused capital flow in the short-run.

In addition, Puah et al. (2016) empirically examined the macroeconomic elements of capital flight, namely FDI, stock market, external debt and political risk in Malaysia. The study utilized ADF and PP unit root tests, KPSS stationary test, bounds test for cointegration and the ARDL approach in their study. Other than that, World Bank (1985) measurement were employed in order to determine the aspects that influenced capital flight in Malaysia. The empirical findings of Puah et al. (2016) revealed that FDI, stock market, external debt are negatively related with capital flight, whereas political risk is found to have positive association with capital flight.

Choong et al. (2010) investigated the effect of debts and economic growth in Malaysia for an empirical period of 1970 to 2006. Choong et al. (2010) also applied different types of debts other than external debt in their empirical study, specifically long-term debt, short-term debt, total debt service and multilateral debt. The empirical results illustrated that an increase in the level of external debt have impact on the economic performance as countries with better financial systems have had greater success in absorbing private capital inflows rather than capital outflows. In short, reduce in the level of external debt will eventually draw investors to invest in a country due to better economic performance.

Further investigation was carried out by Lau et al. (2010) for the period of 1976Q1 to 1997Q2 and the post-crisis period from 1997Q3 to 2008Q1. Lau et al. (2010) investigated a study on twin deficits in Asian crisis affected countries. ADF unit root test, Johansen Multivariate tests and

Granger causality tests were conducted in testing the empirical analysis. The findings revealed that imbalance of huge debt might lead to a hard landing for countries that appear insolvent. As a result, reducing the debt burden is important because it may cause a decline in terms of a country's competitiveness and lead to outflow of capital to other country, thus discourage investment.

By employing dataset from 1980 to 2004 in twelve Asian countries, Tang et al. (2007) examined the relationship of stock market and economic performance. The empirical outcomes of cointegration test exposed that stock markets is imperative in promoting economic growth in both short-run and long-run. Therefore, capital market measures to increase revelation and more strict regulations should be implemented by the countries authorities in order to shield investors. As such, capital outflow can be avoided as investors regard the country as safe and stable. Conversely, a combination of findings between stock market and economic growth was found in Granger causality test results.

The determinants of international capital flows in Malaysia was explored by Abdullah et al. (2010) using quarterly data span from 1985:1 to 2006:4. Johansen and Juselius cointegration test was adopted in their empirical estimation. The empirical results revealed that political issues such as confronting with corruption and favorable policy towards FDI need to be addressed as these are essential in order to be appealing to investors. Besides, World Bank (1985) measurement was applied by Puah et al. (2016) to assess capital flight in Malaysia. The data employed was annual data ranging from 1975 to 2013. The results showed that there is an existence of a positive and significant relationship between political risk and outflow of capital. To sum up, this means that increase in political risk will escort to expansion in capital outflow. As such, this discouraged

investment activities among investors. Moreover, Le and Zak (2006) conducted a study on capital flight and political risk in 45 developing countries. Pooled cross-sectional time series analysis was adopted by using data from 1976 to 1991. The results indicated that political instability is found to be the most important factor link to flow of capital. This is due to violent events such as guerilla warfare and assassinations or even political turmoil such as irregular government change have the capability to increase the World Bank (1985) capital flight measure. This happened as the investors' confidence level was severely affected and many desired to transfer their funds overseas.

Furthermore, Lan et al. (2010) conducted a study in China using yearly data span from 1992 to 2007 and ARDL bounds testing procedure was adopted in their study. The authors discovered that changes in the domestic economy and political environment will affect capital flow. These included political instability such as social disorder and adjustment in economic policies. Cheung and Qian (2010) studied the empirical determinants of China's capital flow by employing quarterly data from 1999Q1 to 2008Q2. The empirical evidence depicted that outflow of capital could be seen as a result of distortions due to political structure. Hence, it is proven that when the country is politically safer, it will help in attracting and boosting the confidence of investor to invest.

In addition, Brada et al. (2011) estimated capital flight from seven countries of the Commonwealth of Independent States, specifically Armenia, Azerbaijan, Belarus, Kazakhstan, Moldova, the Russian Federation, and Ukraine. The study employed yearly data from 1995 to 2005 and OLS panel regression was adopted in their studies. Brada et al. (2011) discovered that political factors affecting the expected return to domestic investments can be captured by the country's polity score variable. Moreover, a more democratic regime provides investors with protection through the rule

of law and limits on predation. In other words, the outflow of capital can be lessened as political risk is low as investors regard the country as politically stable for investment activities. Thus, political risk and capital flight are positively related.

Thales Pacific et al. (2015) conducted a study in 23 African francophone countries. The purpose of the study was to examine the factors that discourage or encourage the activities of FDI. Thales et al. (2015) employed a sample period covering 2004 to 2012 in the empirical analysis and few determinants were applied in the study, namely growth rate of GDP, exports in goods and services, official exchange rate, domestic credit to private sectors, information and communications technology, political stability and absence of violence. Furthermore, Hausman test was tested in obtaining the empirical results and the final model of the study was fixed effect model. The results showed that the aforementioned variables are important factors that influence FDI. They suggested that authorities must battle against corruption and lessen inflation, develop mechanisms to enhance the credibility of Africa continent, construction of roads to facilitate transactions and stimulate transport, increase the production electricity to maintain the long-run sustainability of FDI, and encourage private investment by granting credits, create political stability atmosphere, absence of violence and terrorism. Hence, these convincing environment helps to attract investors.

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