FOREIGN DIRECT INVESTMENT-ECONOMIC GROWTH AND ABSORPTIVE CAPACITY

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ABSTRACT

Foreign direct investment (FD) has been recognized as an important driver for economic growth through its capital accumulation and technological transfer to the economies. The impact of FDI on economic growth has attracted numerous researchers around the world to examine the relationship since decades ago. Empirical findings of the studies on FDI-growth nexus however are still inconclusive and ambiguous. Previous studies has identified a form of absorptive capacity as the key explanatory variable to the mixed findings. Alfaro et al. (2009) describe an absorptive capacity as a precondition that aids a country to garner the diverse benefits and positive impacts of FDI spillovers. Meanwhile, Cohen and Levinthal define an absorptive capacity as "*…an ability of a firm to recognize the value of new, external information, assimilate it and apply it to commercial ends*" (1990: 128). Abundant past studies dwelling into FDI spillovers have made a serious effort in considering the element of absorptive capacity as the main channel towards investigating the effects of the FDI-growth nexus. Until today, various methodologies have been employed and variety of recipient and host countries around the world have been examined in researching the linkage. Recent study by Moralles and Moreno (2020) finds that high absorptive capacity is required in order to collect positive spillovers of FDI. Thus, the aim of this study is to survey the various forms of absorptive capacity that are discovered from the previous studies in enabling the growth effects of FDI on the country's economic growth. The outcome of this study will enhance the understanding on the literature of FDI-growth nexus and provide insights to the policy makers in formulating the strategy of attracting more FDI inflows to the economy.

Keywords*: Foreign Direct Investment, Economic Growth, Absorptive Capacity*

INTRODUCTION

Foreign direct investment or FDI has been recognised as one of the important engines for economic growth. FDI refers to a type of investment that involves the injection of foreign funds into an enterprise that operates in a different country of origin from the investor. UNCTAD (2010) has highlighted FDI as an international capital transfer and a major source of economic development. Meanwhile, UNCTAD (2012) reports significant rise in the global FDI in developed countries and developing countries within the years. The importance of FDI as contributor to the development of the economic growth has been highlighted in various studies. FDI is said to contribute to economic progression through several channels that include competition, linkages, skills and imitation. From theoretical perspective, FDI provides direct impact through capital accumulation and indirect impact through its spillovers. Some studies show direct investment such as FDI has stable features that is suitable in performing its function as an international investment. Study by Chuhan et al. (1996) finds direct investment as less volatile and balances the compositions of the loans and equity in international capital flows for

the country. In addition, study by Lipsey (1999) suggests FDI as relatively higher stability than other types of international financial flow and more recent study by Hobbs et al. (2021) also highlights that FDI as the stable component of foreign capital inflows in developing countries where until now most research has focusing on its contribution towards the countries' economic growth.

Numerous researchers have investigated the contribution of FDI to economic growth since decades ago. However the findings on the existing studies on FDI-growth nexus are still inconclusive. Since there are mixed results, further studies have been focusing on the conditional factors that may contribute to the relationship between FDI and economic growth. Past studies has discovered FDI-growth nexus needs a precondition that serves as an absorptive capacity to enable the spillovers growth effects of FDI. Cohen and Levinthal define absorptive capacity as "*…an ability of a firm to recognize the value of new, external information, assimilate it and apply it to commercial ends*" (1990: 128). In other words for other perspective, the ability of a country to absorb the benefits of FDI is one of the key functions in order to gain its positive impact. Crespo and Fontoura (2007) highlight that absorptive capacities of domestic firms and regions are important preconditions for realizing the benefits of FDI inflows. Since different countries have different levels of development and local conditions, the impact of FDI in each country would be different. It is expected that maximum benefits of FDI spillovers could be reaped through higher levels of absorptive capacity. Many studies empirically show that a country needs a precondition and capacity of absorbing in order to materialize the spillover effects of FDI. This is supported by Moralles and Moreno (2020) that discover high absorptive capacity is required in gaining the positive spillovers of FDI. In addition, Tien et al. (2021) highlight that many studies concern on the role of conditional factors in the relationship of FDI and growth at the national level. This indicates the importance of the role of absorptive capacity in the FDI-growth nexus.

Thus, the question is what are the various conditional factors or forms of absorptive capacity that are discovered by the existing studies that investigate the relationship between FDI and growth? This paper will provide more information on the various forms of absorptive capacity or precondition that are investigated in the previous studies in enabling the growth effects of FDI on the country's economic growth. The outcome of this study is expected to enhance the understanding on the literature of FDI-growth nexus and provide insights to the policy makers in formulating the strategy of attracting more FDI inflows to the economy.

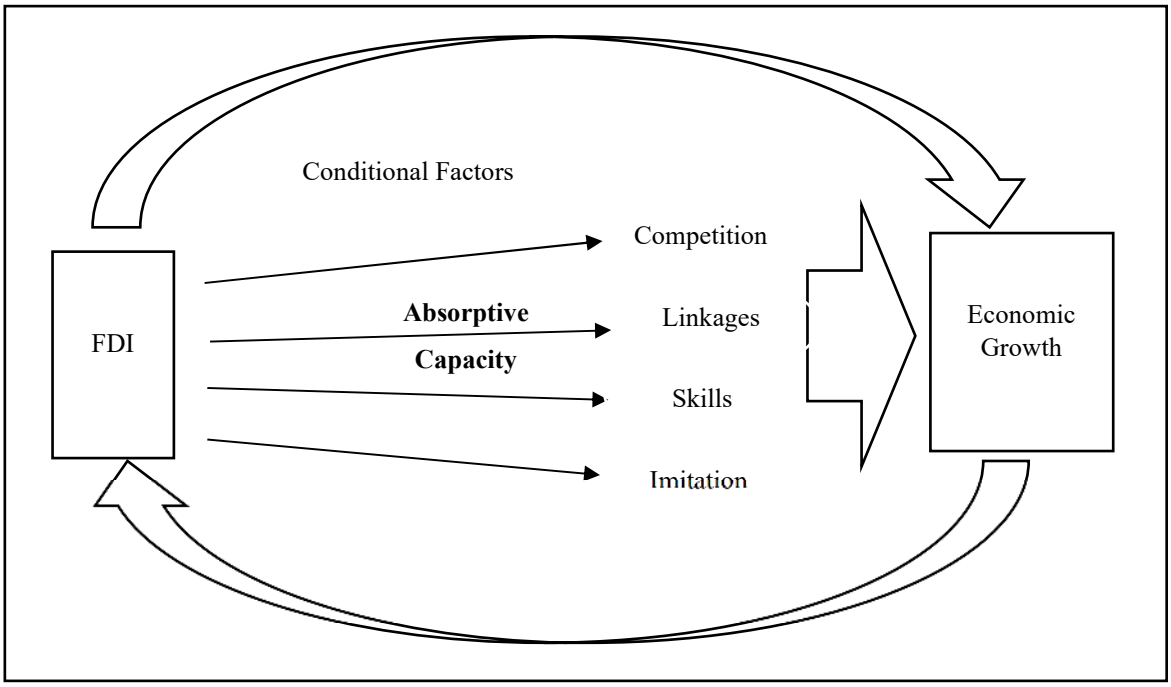
LITERATURE REVIEW

The theoretical background of FDI-growth nexus is underpinned by a neoclassical model and a new growth theory. Economic growth theory by Solow (1956) theoretically illustrated that direct impact of FDI can be in terms of the accumulation of capital as an engine for economic growth. In addition, in reference to the Solow's neoclassical model, capital accumulation contributes to the economic growth proportionally to the capital share of national output. The interjection of FDI is theoretically recognized as capital accumulation that directly impacts output or economic growth of a country. Aghion and Howitt (1998) who significantly contributes to the new growth theory highlight the fact that the innovations generated from technological knowledge take one step ahead in the form of new goods, new markets or new processes towards sustaining a positive growth rate of output per capita in the long run. Thus, leaning on the features of capital and its spillovers, FDI is seen as catalyst for economic growth where it would generate direct and indirect impacts through the positive spillovers. Thus, from

the theoretical perspectives, FDI has a potential to contribute to economic growth through its benefits and spillovers.

Study by Alfaro et al. (2004, 2009) has shown the benefits of FDI can be in terms of its knowledge spillovers of technology transfers, innovations; introduction of new processes to the domestic market, learning-by-observing, training of labor force and managerial skills. These benefits can be transferred to the host country through FDI spillover. It thus can increase the productivity of the host economy and ultimately promote economic growth. Theoretically, FDI is projected to contribute to economic progression through several channels that include competition, linkages, skills and imitation. Figure 1 shows the illustration on the contribution of FDI to economic growth and its direct and reverse impacts.

Figure 1: The relationship between FDI and Economic Growth



Source: Extracted from Nowbutsing (2009)

The role of FDI in promoting economic growth has been investigated since decades ago. However, burgeoning studies that investigate the relationship of FDI and economic growth provide inconclusive and mixed evidence. There are studies that find FDI contributes positively to the economic growth (see for example, Ouyang & Fu 2012; Elsadiq 2012; Hong 2014; Raza et al. 2019; among others) On the other hand, some studies have shown that FDI is negatively related to economic growth (see, for examples; Doytch & Uctum 2011; Lembcke & Wildnerova 2020), while some other studies find no significant effects of FDI on economic growth (Temiz & Gokmen 2014; Agbloyor et al. 2016; Carbonell & Werner 2018; among others). Past studies also discovered that the impact of FDI on economic growth is determined by certain conditional factors of the host countries that is referred as an absorptive capacity that performs as a key explanation for the ambiguous findings in the FDI-growth nexus. As highlighted by Alfaro et al. (2009), absorptive capacity is described as a precondition that aids a country to bring in the diverse benefits and positive impacts of FDI spillovers. In other words,

country's local conditions matter as they can restrict the extent to which FDI benefits materialize.

Numerous studies that include country level and firm level studies have investigated the relationship of FDI and economic growth with the various conditional factors as forms of absorptive capacity. Past studies have employed various measurements and proxies for the conditional factors used as variables in examining whether it influences the FDI-growth nexus of the countries or not. Study by Blomstrom et al. (1992) for example has introduced a conditional convergence comprising of education, change in labor force participation rates, inflows of foreign investment, price structures and fixed investment ratio as determinants that are empirically confirmed to influence the growth rate. In the study FDI inflows are found to be less influential to the poorer developing countries, since their level of development that comprises of those conditional factors is low. Borensztein et al. (1998) that examine the cross-country of panel data for two decades of 1970 to 1979 and 1980 to 1989, find that FDI flows have a positive effect on economic growth. In addition, the threshold stock of human capital is identified as a factor that influences the absorptive capacity of the country that indirectly affects the flow of technology from FDI to growth. Sinani and Meyer (2004) empirically discover that the degree of the FDI spillover effect depends on the characteristics of the incoming FDI and the recipient local firm, those that include recipient firm's size, ownership structure and trade orientation. Li and Liu (2005) who examine the growth effect of FDI for 84 countries, find that the effect of FDI inflows in interaction with human capital is positive but the result on the effects of interaction term of FDI inflows with technology gap on economic growth in developing countries is reportedly negative.

Moreover, Batten and Vo (2009) that examine FDI-growth nexus for a panel data set of 79 countries for the period of 1980 to 2003, find that FDI has a stronger positive impact on economic growth in countries with better education attainment, higher level of openness to international trade and stock market development, and a lower rate of population growth and risk. Elsadig (2012) that investigate the impacts of FDI inflows in Malaysia's economic growth, employs human capital as an absorptive capacity for the growth effects of FDI, and finds that the interaction of FDI and human capital affects the economic growth positively. Alfaro et al. (2009) provide evidence that financial markets act as a channel in facilitating the positive growth effects of FDI to be realized where the study finds that countries with well-developed financial markets gains significantly from FDI through total factor productivity improvements. Extensive studies empirically investigates the role of financial development in FDI-growth nexus and collectively finds a positive relationship between FDI and growth with the existence of well-functioning financial system in a country (see, for examples Hermes & Lensink 2003; Ang (2009), Alfaro et al. 2004, 2010; Azman-Saini et al 2010; Choong 2012; among others).

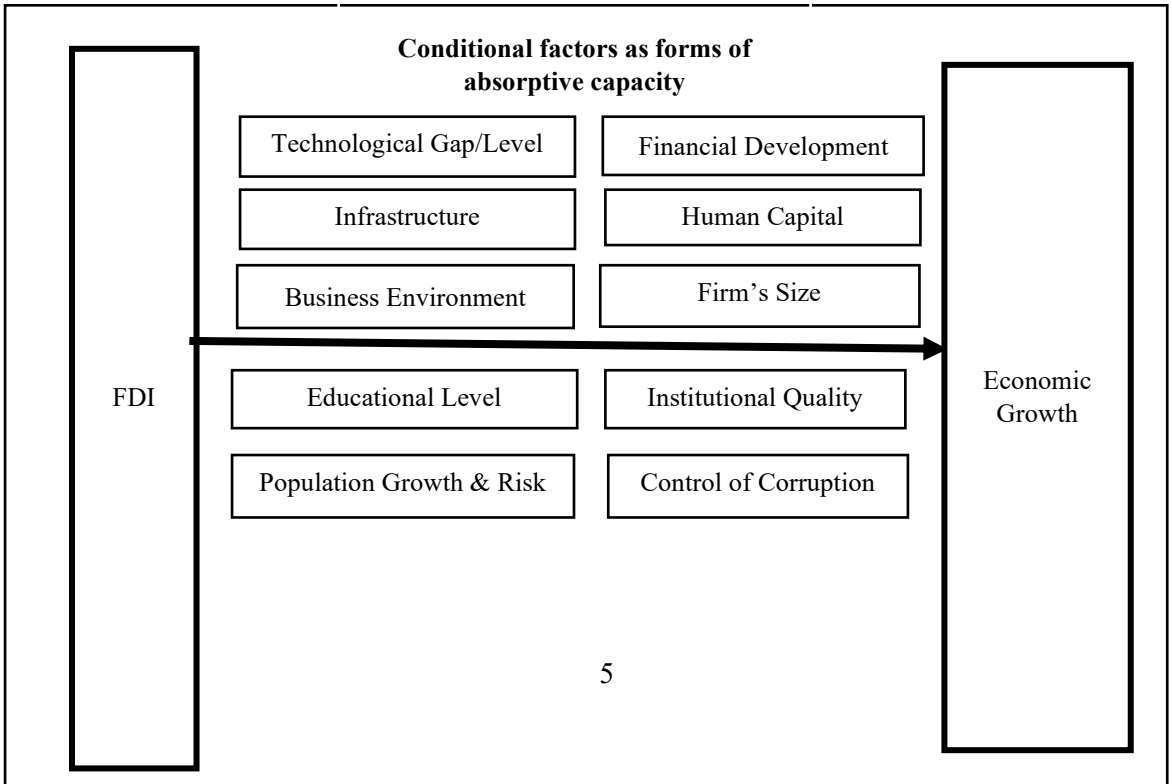
Meanwhile, study by Islam et al. (2018) suggests an implication of policy in bringing more depth to the financial system in order to promote the innovative environment through FDI spillovers. Furthermore, study by Fifekova and Nemcova (2015) finds that FDI inflows to the V4 economies depend on their ability to secure the favorable business environment and conditions required for the free movement of international capital. Raza et al. (2019) that analyse the relationship between FDI and economic growth in the presence of good governance system in the OECD countries for the year of 1996 to 2013 and using fixed effect model and the GMM estimator, discover the more the countries maintain their institutional quality the better will be the economic growth and the FDI inflows. In addition, study by Ogundipe et al. (2020) that examines the relevance of infrastructural absorptive capacity in the FDI-growth in ECOWAS Sub-region for the period 1995–2017 using the system GMM estimation approach, suggests that FDI promotes growth through growth responded less proportionately to FDI inflows.

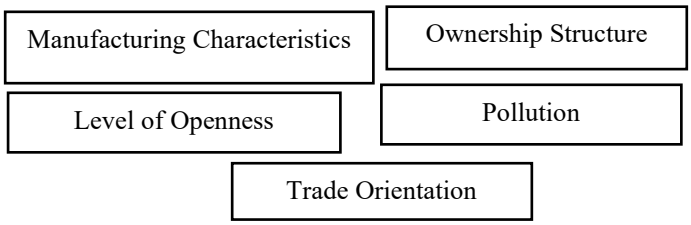
More recent study by Le et al. (2021) that investigates the relationship between FDI and economic growth at the provincial level by using time-series data in Vietnam from 1997 to 2019, discover that the impact of FDI on economic growth is influenced by infrastructure and human capital. It is also found that the lack of human capital, which is trained personnel and infrastructure, is the main barrier hindering and inhibiting FDI's contribution to local economic growth. Makiela et al. (2021) investigate the impact of FDI on economic growth and productivity of Visegrad Group sectors or V4 countries that include Czech Republic, Hungary, Poland and Slovakia, find that FDI has a positive impact on the sectors and its effectiveness depends upon the technological gap between the host and home economy. Qureshi et al. (2021) that investigate the causal relationship between FDI, corruption and economic growth in developed and developing economies using the PVAR model for the period 1996 to 2018, discover that control of corruption has inverse linkage with FDI and economic growth in developing countries which suggests that poor institutional quality and higher level of corruption boost investment and economic progress. Whereas in developed economies, the strong institution and regulatory mechanism encourage investments and economic development.

Meanwhile, Hoa et al. (2021) analyze the factors affecting FDI in the Northwest region of Vietnam in the context of global economic integration in the period of 2000 - 2019, and discover that the labor force is the main contributor in the FDI-growth nexus. Study by Tuan (2021) that investigates determinants of linkage between FDI and domestic firms in Vietnam, finds that more provincial economic growth, technology level, regional factors, firms being located in industrial zones, and the policies of each province help to increase the linkages between FDI and domestic firms. In addition, factors such as the manufacturing characteristics of the industry or economic area also affect the linkage of FDI firms with domestic firms. Therefore, the country should focus on the factors or determinants in order to facilitate attracting FDI to economic development.

Figure 2.0 shows the summary of various conditional factors that are examined as forms of absorptive capacity in investigating the relationship between FDI and economic growth. Overall, there are approximately about 15 different variables or conditional factors with various types of measurements or proxies that have been employed in the past studies that cover from the year 1992 to 2021, that are served as preconditions in investigating the contribution or impact of FDI to economic growth from the country level as well as firm level studies.

Figure 2: FDI-Growth Nexus and Various Forms of Absorptive Capacity





CONCLUSION

Burgeoning studies have investigated the impact of FDI on economic growth. However, the results from the empirical studies are still ambiguous and inconclusive. An absorptive capacity has been recognized as the key explanatory for the mixed findings. This study reviews past literature that covers from 1992 to 2021, and finds that there are about 15 different variables or conditional factors with various types of measurements or proxies that have been employed in the studies that serve as forms of absorptive capacity or precondition in examining the FDI-growth nexus that cover country level and firm level studies. This study discover gap in FDI-growth nexus studies and provides potential research to be implemented in future for the economic development of the country. This study also contributes in the understanding on the literature of FDI-growth nexus. Since different country has different ability or capacity of absorbing the benefits of FDI, thus more evidence is needed in providing guidance to policymakers to regulate FDI policies that will affect the entry of foreign firms, encouraging more FDI inflows and contribute to economic growth of the country. Policymakers need to design policies that consider the conditional factors as form of absorptive capacity or precondition in encouraging more FDI inflows towards promoting the country's economic growth.

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