

Impacts of FDI in Developing Economies: A Survey of Theory and Evidence

Wahyudi Wibowo

Master of Management

University of Pelita Harapan Surabaya, Indonesia

wahyudi.wibowo@uphsurabaya.ac.id

Abstract: The impacts of foreign direct investment (FDI) toward the economic development of host developing economies have been intensively studied in the past two decades. After confirming the influences of economic globalization on international trade and investment of developing economies, this paper highlight the complexity of FDI patterns as well as the mixed impacts of FDI in the host economies. In this sense, this study suggests that a comprehensive explanation on the impacts of FDI in developing economies should not rely on one theoretical approach, but rather on a combination of approaches, which is a source for future studies. Furthermore, it will be beneficial to focus the analysis on a single host economy, either as a whole or at the sectoral basis. This study also concludes with some policy implications.

Keywords: foreign direct investment, multinational corporations, economic development, technological development, developing economies.

A. INTRODUCTION

The impacts of inward foreign direct investment (FDI) toward economic development have been intensively studied in the past two decades. In this regard, various theories explaining the impacts of FDI in host developing economies have been introduced, mostly by connecting them to the FDI determinants.

However, questions are addressed to the validity of major FDI impacts theories. In contrary to the positive hypothesis of FDI impacts, empirical evidences on this issue were mixed, at best. For examples, the mixed impacts of FDI on host developing economies were surveyed in Gorg and Greenaway (2004), Lall and Narula (2006), and Rugraff, et al. (2009)

Researches on the relevance of FDI toward host developing economies have grown in the past two decades. This is due to some factors. First, recent findings suggested the existence of uneven pattern of development in most of the developing economies, which in some extents were associated with economic globalization. Second, since the past three decades, many developing economies have been inclined to FDI-assisted development policies. Third, notably, in contrary to the previous presumption that FDI is good for the host economy and more is better, the evidences so far were still inconclusive.

FDI is generally defined as foreign firm investing in a certain host economy, which gives the firm large enough equity shares to hold significant

control of ownership and long-lasting interest. In the most cited criterion of IMF, the equity share is at least ten percent of ownership or voting power to differentiate FDI with the other type of foreign investment named portfolio investment (Ietto-Gillies, 2005). Thus, FDI is related to direct international production, which can be in the form of a completely new business establishment (greenfield) or via mergers and acquisitions (M&A, brownfield).

The term developing economies used in this study refers to the World Bank classification, which based on income per capita levels. To differentiate them with the developed economies, developing economies are those with GNI per capita of less than US\$12,476. Generally, these economies are characterized by their less capital-, skilled labor- and technology-intensive endowments. Many of them have pursued economic development through industrializing their economies. They are economies with passionate endeavors to catch-up their development stages. Other terms which sometimes used are less developed economies (LDCs), third-world economies, or non-industrialized economies.

This study aims to conduct a literature survey toward theories and evidences of FDI impacts on host developing economies. It seeks to answer these interrelated questions:

- a) What are the backgrounds of FDI inflows in host developing economies?
- b) What are the determinants of inward FDI in host developing economies? And, in relation to them, how FDI impacts the economic development of the host economies?

- c) How good the available theories explain the impacts of FDI in host developing economies?

The results of this study can be used to revisit the existing models of FDI impacts, particularly which deal with the case of developing economies.

To achieve its aim this study surveyed prominent literatures and empirics in the last two decades. Main sources of the survey were the publications of the National Bureau of Economic Research (NBER, <http://www.nber.org>) and EconPapers (<http://www.econpapers.repec.org>). The literatures and empirics were then reviewed thoroughly by comparing and summarizing them.

The outline of this paper is arranged in the following. Sections B and C of this study begin with examining the global trends of FDI in host developing economies, including the increasing roles of MNC. Afterward, Section D will survey the theoretical explanations related to the determinants of inward FDI in host developing economies. Section E will present a survey toward the existing theories and empirics on FDI impacts in host developing economies. Finally, Section F concludes with some suggestions for future studies and policy implications.

B. GLOBALIZATION AND DEVELOPING ECONOMIES

Globalization has brought an accelerated level of economic interaction between economies since the early of nineteen centuries. Globalization here defined as the integration of international commodities and factors of production, which represents an unprecedented shift in the relationships of the world economies through a much less-constrained trade and financial flows (O'Rourke and Williamson, 2000). Prior to the development, the economic thoughts have changed revolutionary by Adam Smith (1776), who argued that the wealth of nations should be achieved by means of specialization and free exchange. This concept was then extended by David Ricardo (1817), who introduced the notion of comparative advantages. According to Ricardo, even if an economy does not have any absolute advantage, this economy and its trading partners would still benefit from doing international trade if each of them concentrates on the production of goods of their comparative advantages.

Advancement in the economic relationships among economies and progress in the economic theories have driven the economic policy of many major economies from closed national system to trading system. In fact, this tendency was also escalated by the major technical innovations in transportation and communication technologies in past decades. The technical innovations have

reduced significantly the international transaction costs to maintain effective economic links at a global scale.

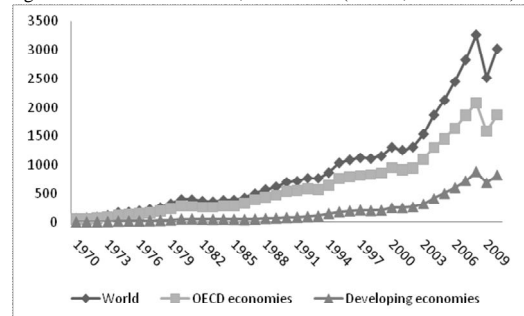
Therefore, it has been a mainstream believe that opening the economy toward international exchange flows of trade and investment is the best way to precede the economic development. In this respect, there are two realms in which globalization of economy occurs after the Second World War. First, in domestic front, by restoring entrepreneurial dynamism and social discipline through deregulation, privatization and budget cut. Second, at international level, accelerates global integration through reducing restrictions on the international flow of trade, direct and indirect investment, and technology (Chang, 1998). To better explain the examination, figures of international trade and investment from 1970 to 2010 are given in Figure 1 and Figure 2.

In terms of international trade, the pattern of world's merchandise total trade from 1970 to 2010 had performed an increasing growth with two faster rates in 1987 and 2003, but then experienced a sudden decline at 2008 due to economic crises in most of the industrialized economies (Figure 1).

The pattern of international trade for developing economies shows similar figure to the world's pattern. However, in general these economies had been grown at faster rates especially during the periods of 1991-1997 and 2000-2009. Notably, the share of developing economies in merchandise trade had been continued to increase at a modest phase from 13 percent in 1970 to 27 percent in 2010.

In terms of international investment, the pattern of the world's net FDI inflows from 1970 to 2010 shows a more dynamic figure, compared to the pattern of world's trade. World's net FDI inflows from 1970 to 1985 had been increased slowly. Then, starting from 1986, there had been a fast and sustained growth up to year 2000, before then plummeted during the period of 2001-2003. FDI inflows had shown recovery during the period of 2004-2007, before then plummeted again in 2008-2010 (Figure 2).

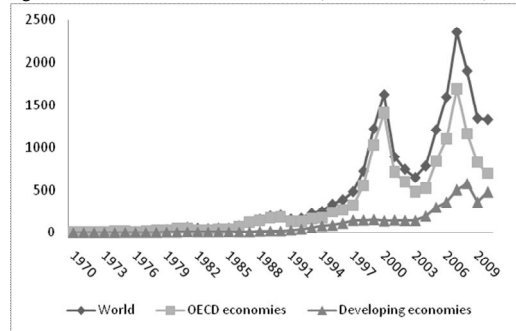
Figure 1. International Trade, 1970-2010 (trillion, current US\$).



Source: World Bank database.

Though the growth rates of net FDI inflows for developing economies were generally slower, the pattern had shown a more steady growth with the exception for the year 2009. In addition, the share of developing economies receiving net FDI inflows had been continued to increase from averagely 15% in the period of 1970-1991 to 36% in 2010.

Figure 2. Net FDI Inflows, 1970-2010 (billion, current US\$).



Source: World Bank database

In addition, growth of world's FDI inflows had been increasingly surpassing the growth of world's merchandise trade since 1985. This means that in the past two decades FDI has increasingly more important (see also analysis in Brakman and Garretsen, 2008). Note, however, the overwhelming shares of both trade and FDI were between OECD economies at the similar levels of development (see also analysis in Pollin, 2002; Crotty, et al., 1998).

However, do the developments brought by the globalization denote a broadly shared wealth of nations? Discussion in Goldberg and Pavcnik (2007) presents interesting observations.

In contrary to the distributional effects of globalization in the developed country, Goldberg and Pavcnik (2007) found the evidence for income inequalities in several developing economies. The inequalities, which associated with the progress of globalization, were conceivably due to low labor reallocation and low sectoral reallocation in response to the higher level of openness to trade.

Thus, though there has been unarguably remarkable developments brought by economic globalization, it was pretty obvious that globalization has gone toward uneven patterns of economic development, which was less favored to the developing economies.

C. INCREASING ROLES OF MNC IN DEVELOPING ECONOMIES AND GLOBALIZATION OF PRODUCTION NETWORKS

Globalization era has particularly marked by two kinds of change (Baker, 1998). First, the quantitative change, where the extent of economic interactions between people in different economies

has increased in terms of trade, foreign exchange, investment, and people migration. Second, the qualitative change, where the power of nation-states to influence economic activities has decreased as economies become more integrated and the power of private businesses and market forces become stronger.

The private businesses being concerned here is referring to large business entities named multinational corporations (MNCs). MNCs are the main actor of FDI. By definition, MNC is firm that own assets and operate direct business activities in at least two economies. MNC has the ability to plan, organize, coordinate and control its international production from its headquarter and under common objective and strategy (Ietto-Gillies, 2005).

In facts, MNCs have managed about 75% of world trade in manufactured goods and hold 75% accounts of all industrial R&D in the OECD economies. In most cases, MNCs promote the economic integration among developing economies into some emerging networks of globalized productions and markets (Narula, 2001).

Currently, FDI flows to developing economies are increasingly associated with the intra-industry trade and the establishment of vertically integrated production networks. Hence, one should notice the effect of FDI-trade nexus in the cases of developing economies. The FDI-trade nexus is a natural consequence of the efforts of MNCs to form regional supply chains and production networks. This phenomenon is common in developing economies, for example in Southeast Asian and South American automotive and electronic industries.

Moreover, MNCs could bring many additional benefits. These include the advanced technology, sophisticated managerial practices and also distribution networks in export markets. Therefore, it is widely believed among the policy makers of developing economies that pursuing liberal policies toward FDI and MNCs will encourage their economies to perform well, show industrial development and export success (UNCTAD, 2000).

The previous observations have brought us into consideration about the significant role of MNCs on the economic activities of developing economies. However, one should take more explorations about the realities behind. In this regard, there are debates concerning the contributions of MNCs on economic development.

One group highlights the 'bright side', by referring to the positive impacts of MNCs in increasing economic activities among nations; and so expectedly to induce higher growth, more jobs, and other positive spillovers. Another group highlights the 'dark side', with regard to the negative impacts of MNCs on the issues of uneven economic

development, environment, labor and income distribution, and also human rights of the host economy (Forsgren, 2008).

The latter actually sees that the claim of positive impacts from FDI is an overstatement. MNCs certainly have goals that are directed toward their own profit maximizations, while host economy has different goals which are directed to increase tax revenues, job creations, and higher standard of living. It is argued that the two are often incompatible.

D. DETERMINANTS OF FDI

The previous sections have made clear the backgrounds and tendencies of economic globalization, particularly on the vast developments of international trade and investment in developing economies. This section presents a survey on the major determinants of FDI in developing economies, which later will be useful for studying the potential impacts of FDI.

There are four major fields of FDI determinants found in the literatures. Those are according to the early studies, macroeconomics views, microeconomics views, and international business studies (Ietto-Gillies, 2005; Forsgren, 2008; Accolley, 2003).

The early studies give views according to the two major branches of economic thought: Marxist approach and neoclassical paradigm. The macroeconomics views cover the influence of macroeconomic factors such as currency differentials, economic growth and market size.

The microeconomics views consider microeconomics viewpoints such as product life cycle and OLI paradigm. Meanwhile, international business studies concern with the internationalization process and the behavior of multinational corporations.

The first field of FDI determinant theories to be elaborated here is according to the early studies (Ietto-Gillies, 2005). The basic approach of Marxism analysis toward FDI is that the motives of international investments are seen as an inevitable consequence of capitalists' development. This view has relevance in explaining the increasing concentration of productions and the creation of oligopoly structures in many sectors and markets of developing economies. In this sense, Hobson (1902) explained that the primary reason for capitalists to seek for abroad investment is due to lack of effective demand (capitalists' development tends to relate with overproduction). To this point of view, Bukharin (1917) added that capitalists and their economies tend to secure raw materials and investment opportunities abroad.

Turning now to the neoclassical paradigm. The main theoretical background of this paradigm is

based on the Heckscher–Ohlin model of trade. In this view FDI is seen as part of international capital trade. The economic intuition behind the Heckscher–Ohlin model is based on the assumption that commodities differ in relative factor intensities and economies differ in relative factor endowments, leading to international factor price differentials. Hence, a relatively capital-abundant developed economy would either exports the capital-intensive goods or -in the absence of commodity trade- moves capital to developing economy, where returns on capital are higher and returns on labor are lower, until factor price equalization is achieved.

The second field of theories is the macroeconomics views. An important determinant of international production from the macroeconomics view is the rate of growth of the host economy. It is argued that changes in the relationship between growth rates in different economies will give impact on the pattern of international capital movement. Capital moves from economies experiencing a slowdown or a downturn in their growth toward economies with higher economic growth rate (Scaperlanda and Mauer, 1969). This theory has high relevance with the current pattern of investments from developed economies to developing ones. Likewise, another theory in this field explains that host economy's market size may be the most influential factor of international investments (Dunning, 1970). This latter theory particularly explains the motive of international investment that seeks to exploit the host economy's market.

Other determinant of international production which often mentioned in the literature is currency differential. International capital movement can be due to a disparity in capital endowments and currency risks. In this sense, both the level and the variability of the currencies' exchange rate are considered.

In addition, there are also other economic indicators which refer to the determinants of FDI. These indicators include human capital endowment, degree of trade openness, investment policy, trade linkages and borders, macroeconomic stability, labor cost, and industrial development stages, which are positively correlated with FDI inflows (Fillat and Woerz, 2010; Nunnenkamp and Spatz, 2003).

Another theory of FDI determinant in the macroeconomics field is the new trade theory of Krugman (1985). New trade theory argues that trade and specialization are due to: (1) advantages of economies of scale, as well as (2) traditional comparative advantages due to differences in factor endowment. The new trade theory brings new explanation about internationalization production of firm in both developing and developed economies.

According to this theory, FDI in developing economies is originated from developed economy.

This is related to the existence of different factors endowment in the two economies. FDI in developing economies deals with the production of both intermediate and final products. The different factor endowment induces to specialization between economies in terms of joint inputs of production under common ownership. The specificity of outputs favors internalization within the firm in a single economy as well as across economies. The model leads to a pattern of vertical integration of production across economies and to intra-firm and intra-industry trade.

FDI in developed economies is related mainly to the direct production of inter-industry (horizontal type), or vertical type found in industries where the MNCs have large fixed costs combined with intangible assets (knowledge-capital model of Markusen, 1984). The large markets of host developed economies -due to the size of the economy and the income level- secure the viability of production in both developed economies.

The third field of FDI determinant theories is from the microeconomics view. The pioneering theory in this field is Hymer's theory (1960). This theory observed that a certain kind of foreign investment, FDI, doesn't follow the neoclassical paradigm. As the neoclassical paradigm theorized, the main determinant for movements of capital across economies is based on the interest rates differential. However, some FDI have different cases: (a) FDI doesn't always involve movement of funds from the home to the host economy, but can be financed by borrowing in the host economy or using retained profits or by payments in kind (patents, technology or machinery) in exchange for equity, (b) FDI often takes place on both ways so both economies involved are the home and the host economy of FDI, and (c) FDI tends to concentrate more in certain industries across various economies, rather than in a particular economy across various industries.

Hymer's theory suggests three determinants of FDI. First, the existence of firm specific advantage that firm can profitably exploit abroad, particularly when the domestic opportunities have been exhausted. Second, the removal of conflict with domestic rivals in foreign markets. Third, firm's diversification strategy in products and markets to spread risks. One key assumption of Hymer's theory is the existence of market imperfections in the market structure, i.e.: the oligopolistic structure, which motivate firm to enter foreign market.

Another theory in this field questions how costs are related to the organization of resources. This theory argues that the decision of international production is related to the motive of internalizing resources available abroad. This type of exploration is named internalization theory. The decision to internalize is assumed to depend on industry-specific

factors (product type, market structure and economies of scale), region-specific factors (distance and cultural differences), nation-specific factors (political and financial factors) and firm-specific factors (management skills) (Coase, 1937; Buckley and Casson, 1976).

A further development toward Hymer's theory and internalization theory shapes OLI paradigm or also called Dunning's eclectic framework (1979). This framework of FDI synthesizes the reasons for firms to operate internationally. FDI is explained by identifying three types of special advantage that a firm might have: ownership, location and internalization (OLI). Ownership advantage refers to the firm's specific advantages over domestic firms, which includes patents, technical knowledge, management skills and reputation. Location advantage is related to some factors that support international production including access to protected markets, favorable tax treatments, lower production and transport costs, lower risk and favorable structure of competition. Internalization advantage relates with the firm's initiative to strengthen its competitive advantages by internalizing resources abroad.

According to OLI paradigm, FDI types are determined by initial or sequential investment. Resource-seeking FDI (seeking for natural or physical) and market-seeking FDI (seeking for domestic or regional markets) are typically initial investment. In contrary, efficiency-seeking FDI (seeking for economies of specialization in production processes) and strategic asset-seeking FDI (seeking for foreign networks of assets, such as technology, organizational capabilities and markets) are typically sequential investment (Dunning, 1998).

The four foreign investment types can further be grouped into two categories. The first category includes the first three types: asset-exploiting investment, which aims to generate economic rent by using the existing firm-specific assets. The second category is related with the fourth type: asset-augmenting investment, which aims to acquire new assets that protect or enhance the existing assets.

In general, developing economies are unlikely to attract the second category of FDI, but to attract the first one. This reflects their stage of economic development. Least developed economies would tend to attract mainly resource-seeking FDI and economies at the catching-up stage mostly attract market-seeking FDI. Efficiency-seeking investments, with the most stringent capability needs, will tend to focus on the more industrialized developing economies (Lall and Narula, 2006).

Another important theory in microeconomics views is the product life cycle theory. In this theory, growth of demand for products is linked to the cycle in the product's life

from invention to growth to maturity (Kutznets, 1953). At the initial phase of product's life cycle (invention phase) and the growth phase, where large amount of capital and high-skilled manager for mass production are needed, developed economies have their advantage. But then developed economies lose their competitiveness in the last phase (maturity phase) when the product is standardized and needs large amount of unskilled-labor. In this last phase, the developing economies are found their competitiveness in the production.

The fourth field of FDI determinant theories is the international business studies. This field actually consists of several theories which related to the behaviors of MNC, such as internationalization process, organizational capability, contingency, business network, and institutionalization theories (Forsgren, 2008). In this paper, only one relevant theory will be discussed. That is the theory of internationalization process.

The internationalization process theory explains that generally MNC takes several gradual stages before expands its activities abroad (Johanson and Wiedersheim-Paul, 1975). At the first stage, the MNC-to-be just produces and sells its goods and services at home. The firm does not undertake any regular export activity because of lack of expertise and a tendency to avoid risks.

During the second stage, the firm starts its international involvement by exporting goods and services to neighboring economies or economies the firm knows well via independent representatives or agents. The psychic distance between the firm's home economy and a given economy, in terms of differences in language, culture, legal system, level of education, level of industrial development, and technological capabilities are strongly influenced the decision to export.

The firm enters the third stage of the establishment chain when it begins to establish sales subsidiaries abroad. Here, the size of the potential market can be a determining factor in the choice of where to establish the first sales subsidiaries. The fourth stage of the process is the setting up or the acquisition of manufacturing facilities abroad. The establishment of manufacturing facilities abroad is influenced by several forces: psychic distance, tariffs, non-tariff barriers, and transport costs. In this sense, developing economies often have the advantages for the location of international production.

E. IMPACTS OF FDI

In this section a survey toward the impacts of FDI on host developing economies will be delivered. In general, the expected positive impacts are based on the presumption that FDI and MNC are indispensable agents for economic development.

This claim is grounded, for instance, in the successful cases of the East Asian NIEs-4 of Hong Kong, Taiwan, South Korea and Singapore.

The first form is a direct gain or in terms of the increase of capital formation, domestic production, number of employment and taxation. The second form is an indirect gain or externalities in terms of foreign technology spillovers and human capital development. Therefore, some developing economies have made some policies to increase the volume of inward FDI, in the past three decades. The standard tactic to promote FDI includes the extension of tax holidays, exemptions from import duties, and the offer of direct subsidies.

However, while in theory the nexus between FDI and growth is generally positive, the empirical literature is far less conclusive. Recent empirical evidences on the impacts of FDI in developing economies are mixed. The literature on the effects of foreign investment in developing economies identifies many second-best problems (Caves 2007). Beside the positive impacts of FDI, there also some evidences of negative impacts generated by FDI, for example in the survey of Gorg and Greenaway (2004). A brief summary on FDI impacts studies in developing economies is given in Table 1 (in the Appendix).

E.1. Performance Impact

In the neoclassical literature, FDI is associated positively with output growth, because FDI may enlarge the production possibility frontiers, increase the capital formation and create more jobs. Furthermore, in some cases FDI may transfer new technologies and introduce sophisticated managing techniques that raise total factor productivity of the host economy. Therefore, there seems to be widely held assumption that foreign firms bring not only new investment that boosts national income but also secondary spillovers, resulting in productivity growth.

However, there are as well possibilities for negative results, which are prevalent in the host developing economies. First, the most plausible is that foreign firms reduce the productivity of domestic firms through competition effects (Aitken and Harrison, 1999; Konings, 2001). Second, another explanation is there may be lags in domestic firms' learning from MNC, which short-run analyses do not pick-up. This is related with absorptive capabilities of the host economy (Kokko, 1994). FDI spillovers depend on the complexity of the technology transferred by MNCs and on the technological gap between domestic firms and MNCs. Damijan, et al. (2001) relate absorptive capacity with the level of domestic firms' R&D activities.

Another study of Finlay (1978) emphasizes the importance of relative backwardness. The study

suggests that greater the distance between two economies in terms of development, greater the backlog of available opportunities to exploit in the less advanced host economy, and thus greater the pressure for change and the more rapid the uptake of new technology. Here, technological gap is regarded as the driver of spillovers.

Nevertheless, in contrary, technological gap can as well act as the barrier of spillovers (Glass and Saggi, 1998). The bigger the gap in terms of human capital, physical infrastructure and distribution networks, the less likely the host economy to have additional inward investments, and the lower the quality of technological spillovers.

The issue of the absorptive capacity of host economy is often captured by differences in the stage of development between home and host economy. For example, Markusen and Rutherford (2004) show that the speed and degree of positive spillovers from FDI is positively related to the absorptive capacity of the host country. Positive spillovers will only occur in a suitable setting, in terms of human capital endowment, private and public infrastructure, and legal environment. In addition the absorptive capacity of host economy also relates with the industrial structure of the economy (Filliat and Woerz, 2010).

Third, one might consider that MNCs have incentive to prevent the leakage of their specific advantages that would enhance the performance of their local competitors. However, they are willing to transfer knowledge to their local suppliers. MNCs may voluntarily or involuntarily help increase the efficiency of domestic suppliers or customers through vertical input-output linkages. MNCs may provide technical assistance to suppliers to help them raise the quality of the intermediate products they produce, or they may simply insist on high quality standards for local inputs which is an incentive for the domestic suppliers to upgrade their technology (Moran, 2001). Therefore, FDI spillovers are most likely to take place through backward vertical linkages. This explanation is supported by evidences found by some studies, for examples in Kugler (2001) and Blalock and Gertler (2003).

Several factors could potentially drive the vertical spillovers. Firstly, the motivation for undertaking FDI is likely to affect the extent of local sourcing by foreign affiliates. It has been suggested that market-seeking foreign affiliates tend to purchase more locally than export oriented ones. Quality and technical requirements associated with goods targeted for the domestic market may be lower and thus local suppliers may find them easier to serve MNCs focused on the local market.

Secondly, it has been argued that affiliates established through M&As or joint ventures are likely to source more locally than those taking form of greenfield projects. The M&As or joint ventures

tend to take advantages of the supplier relationships established by the acquired firm or their local partner (Smarzynska, 2002). In addition, it is important to differentiate the influences brought by different types of FDI (Nunnenkamp and Spatz, 2003).

Moreover, FDI that is integrated into the global sourcing network of the parent MNC would provide more positive impacts on the host economy, when compared to FDI that is oriented toward protected domestic markets and prevented from being integrated into the parent MNC's global sourcing network -by mandatory joint venture and domestic content requirements- would not have such a positive effect (Moran, 2005).

Fourth, there may be large varieties of impacts at the sectoral or firm level that an aggregate approach fails to consider (Gorg and Greenaway, 2004). The ambiguous impacts of FDI on the performance of the host economy may be linked to the fact that the impacts vary across sectors (Alfaro, 2003; Vu, et al., 2005). This factor includes the particular technology level requirement, market orientation, market structure, or degree of linkages of the sector in question.

Foreign investments in sectors with a great learning potential, in industries producing goods of high quality and high technology, and in industries generating external economies of scale, may strongly accelerate the growth rate (Grossman and Helpman, 1992). With regards to the effects from market structure, MNC may bring positive crowding-in effects when some elements of their assets leak out and stimulate the efficiency of indigenous firms. But, the crowding-out effects may take the form of anti-competitive impacts, like the displacement of indigenous firms, the cornering of scarce resources, the channeling of skilled labor from local firms and the squeezing out of domestic-supply networks as new foreign entrants bring with them integrated upstream and downstream supply chains (Rugraf, et al., 2009).

Linkages are also varied significantly by industry. In the primary sector, the scope for vertical linkages is often limited, due to the use of continuous production processes and the capital intensity of operations. Cross-country studies focused on FDI directed to resource-based sector generally insist on mixed impacts on productivity, or even suggest negative effects (Sachs and Warner, 1995). In manufacturing sector, the potential for vertical linkages is broader, depending on the extent of intermediate inputs to total production and the type of production processes (Lall and Narula, 2006).

E.2. Labor Impact

This part discusses some critical issues on the impacts of MNC and their international

production activities toward job opportunities, level of wages and the level of education and skills. This is quite an important issue to be discussed, which usually acts as the basis for the policy makers to invite more FDI. In 1999, MNCs appeared to be responsible for the employment of over 86 millions worker (UNCTAD, 2000).

First, consider the case of mergers and acquisitions (M&As) that in facts take the majority of FDI in the last two decades, with almost 80% of total FDI in some years. This type of investment generates extra capacity for the company, but not for the host economy or the whole world. They deal only with the increase of ownership control and the production capacity of the acquiring company, without creating any new capacity in the host economy. In the short-run, M&As tend to not create any job. But, in the medium term, it is likely for them to do jobs cutting as restructuring and rationalization follow the M&As, in order to increase the company's efficiency. Only in the longer run the M&As might invest organically and this would lead to the creation of new jobs.

Second, in the case of newly foreign investments (greenfield FDI). It does generate new capacity and hence hold the potential for more jobs creation in the host economy. Nonetheless, it is also possible for the MNC to increase its capacity while creating only few job opportunities. It is especially happened for the high capital-intensive investments. FDI in developed economies tends to lead to capital-intensive production, while in developing economies it seeks for labor-intensive investment. The potential of extra jobs creation is bigger in the developing economies than in the developed economies.

Note that the previous description of greenfield FDI and its potential impact on the jobs creation is based under assumption that the FDI adds to the existing investment plans in the host economy. However, the situations are not valid if the FDI just replace the planned domestic investment and production of the host country. In this particular situation, domestic firms may not be able to compete with their foreign competitors. Instead, a crowding-out effect in the jobs creation might happen.

The above impacts are named as direct effects of FDI. In addition, there are also some indirect effects. First, the indirect effect can come through the FDI-trade nexus. If FDI increases export opportunities of the host country, this may lead to additional jobs creations. On the other hand, if it brings more imports, for instance in a market-seeking FDI that relies on materials from abroad, then it may detract from jobs creation in the importing country.

Second, the indirect effect can come through the vertical production chain activities. If the supply chain operates within the economy, the indirect employment effects will be positive because

the suppliers/distributors are nationals. However, if it extends abroad then there may not be many positive effects.

Third, there is also indirect macroeconomic effect, where the effects of income taxes and employment multiplier may operate in the case of greenfield FDI. But, all of these indirect effects do not relate exclusively with FDI since it could also come from all investment of the capacity creation, whether foreign (multinational) or domestic (uninational).

Another potential impact of FDI is toward the quality of employment. While the quantity area deals with jobs creation, the quality area relates with wages, productivity and skills, and the bargaining power of labor. In this respect, most of the previous studies confirm that the productivity levels are higher in MNCs than in the smaller uninational (domestic) companies. MNCs' production usually operates in higher level of capital per unit of output. On balance, MNCs are larger and tend to use higher capital-intensive production techniques. Higher productivity level allows the company to pay higher than average wages. Higher productivity level may also be achieved through the upgrading of the skills level of the workers, since MNCs tend to have larger spending on training and development.

A direct positive effect of higher level of wages paid by MNCs, however, might bring indirect negative effect on domestic firms. Smaller domestic firms have to compete with them or getting less skilled-labor. On the other hand, the positive indirect effects of FDI on the level of knowledge and skills of the local economy may take place when trained labors from MNCs move to the domestic firms.

With regard to the effects of FDI on the bargaining power of labor, the activities of MNCs can lead into various types of fragmentation, which bring lower bargaining power of labor toward capital. In this case, fragmentations are take place in terms of geographical or political boundary, organization, and production processes toward labor power in different economies. This is called the 'divide and rules' strategy (Cowling and Sugden, 1987).

MNCs use the latest technologies and organizational development to divide the production process into different components that requiring different levels of skills for their production in many host economies. As a result, in the 1970s there had been a huge development of new international division of labor (NIDL) in developing economies, which generated by the MNCs' strategies of international location of production.

E.3. Trade Impact

In many ways, MNCs are the control center for a large portion of international transactions. For example, almost half of trade flows are intrafirm or

trade within an MNC (Blonigen, 2005). However, in this regard, there are some important issues to be considered in analyzing the impacts of FDI on trade.

First, there is an issue of complementary versus substitution relationship between trade and international production. To what extent does direct production in a host country substitute for export to it? To what extent do the strategies of international vertical integration will generate more trade? On the neoclassical literature, trade impediments will stimulate international production, while restrictions to international capital movement will stimulate production at home and thus inducing international trade. In this framework, FDI and trade are substitute for each other. It basically analyzes international production and trade as sources of supply for the domestic market.

However, note that the relationship between international production and trade differs according to three types of production (Cantwell, 1994). In the resources-seeking production, the foreign investment brings complementary relation to the host economy. The specialization between economies into resources-based and manufacturing-based could generate trade. In the case of market-seeking production, the foreign investment brings substitution relation to the host economy. Trade barriers stimulate direct production to penetrate host markets, as suggested by the neoclassical framework. Lastly, in the case of the efficiency-seeking or integrated internationally vertical production, the foreign investment brings complementary relation to the host economy. In this case, FDI leads to international trade as components move from country to country. Recall that FDI in developing economies are increasingly of this type.

Next, the analysis toward the impacts of MNCs' international production on the pattern of trade in developing economies can be delivered in several ways. One typical analysis is according to the geographical patterns and the structures of trade. In this regard, the analysis follows the international products life cycle model. The other ones are with regards to the cases of intra-firm and intra-industry trade. These cases are related to the international vertically-integrated production strategy of MNC, as suggested by OLI paradigm.

E.4. Balance of Payment Impact

When a foreign investment funded by the headquarters of the company, it results in a transaction between the home and host economy. The home economy will register a negative value on the capital account of the balance of payment (BoP), and the host economy will record a corresponding positive value. When the investment abroad produces profits and dividends, these revenues will flow to the opposite direction. Therefore, in the short-run, financial capital may leave the home

economy to fund the investment in the host economy. However, in the medium term, there will be inflows of repatriated profits/dividends to the home economy. Moreover, as the flow of profits continues for many years, there will be substantial cumulative yearly profits. Any subsequent FDI can be funded from the profits of the past investment.

Additionally, there are also the indirect effects for the host economy with regards to the BoP. Any foreign investment that produces trade impacts through exports expansion, will indirectly produces positive effects on the current account of BoP of the host economy. In contrary, there is also a negative indirect effect which may come from the manipulation of transfer prices. The transfer prices are any prices charged by one part of the company (headquarter or one of the subsidiaries) to another part (any of the subsidiaries or headquarter) for the internal transfer of goods and services. The word manipulation refers to the setting of prices for internal transfers at different levels compared with the prices which might be charged to external clients. The differential setting is intended to maximize the MNC's profits through avoiding larger tax payment.

F. CONCLUSION

The early section of this paper has described the influences of globalization toward developing economies, particularly on the developments of international trade and investment. As economic interactions between economies become increased, it brings complexity to the patterns of international trade and investment. This in turn induces mixed impacts of FDI.

Also, when differences in macroeconomic indicators, endowment, policies and technological development are brought into consideration, theories and evidences surveyed in this paper have confirmed the importance of these factors. It is suggested that the mixed impacts of FDI are due to the two-pronged heterogeneity of: (1) the characteristic of host economies, and (2) the distinctive objectives and strategies of the various kinds of FDI (Cohen, 2007).

Therefore, there is no comprehensive theory of FDI impacts, but a variety of theoretical approaches where each of them attempts to explain some aspects of the impacts. Here, the use of one approach does not necessarily replace the other, but rather give more explanations on different aspects of the same phenomenon.

In this sense, the infinite variables associated with MNC behaviors impede a unified explanatory and predictive theory of FDI (Cohen, 2007). Thus, analyzes on the impacts of FDI should not rely only on one theory, but rather on a

combination of approaches, which is source of areas for future research.

In addition, if country differences and the many different kinds of direct investments are assumed to be the critical factors of FDI impacts on the host economy, then the main lesson might be that the search for universal relationship is futile. Therefore, it is suggested that in order to understand the impacts of FDI, one needs to examine the different types of FDI –that is resource-, market-, efficiency-, or strategic assets-seeking– in a certain case of economy. Alternatively, worthy suggestion is to do the analysis at the sectoral basis of an economy.

For policy makers in developing economies, this study implies two recommendations. First, since the positive impacts from inward FDI are not always guaranteed then policy makers need to pay more attentions on the conditionality. This means, in addition to the adherence to FDI-led growth policy, improvements in the quality of human resource and institutional factors are needed in order to leverage the host economy's absorptive capacity. Targeting the right MNCs for the right sector in the economy could make different. Second, policy makers need to apply a coordinated approach on their trade and industrial policies to get the most benefit from FDI.

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Table 1a. Summary of Empirical Studies on FDI Impacts in Developing Economies.

Impacts	Methodology and data	Period	Finding	Author
Output growth	Panel, industry level (25 developing economies)	1990-2000	- Mixed - Efficiency-seeking FDI bring greater positive growth effects than market-seeking FDI	Nunnenkamp and Spatz (2003)
	Panel, industry level (47 economies including 27 developing economies)	1981-1999	- Negative for primary sectors - Positive for secondary sectors - Inconclusive for tertiary sectors	Alfaro (2003)
	Panel, firm level (48 developing economies)	1983-1996	Positive for firms with export-oriented and high-level of intra-firm trade	Feinberg and Keane (2005)
	Panel, industry level (China, Vietnam)	1990-2004	- Positive for primary and secondary sectors, secondary sectors benefit most - Inconclusive for tertiary sectors	Vu, et al. (2008)
	Panel, sectoral	1997-2006	Negative for mining sectors, positive in several manufacturing sectors	Khaliq and Noy (2007)
	Panel, aggregate	1970-2000	Positive	Bachtiar (2003)
Productivity spillovers	Panel, industry level (China)	1988-1994	Positive for certain manufacturing sectors, inconclusive for other manufacturing	Chen and Demurger (2002)
	Panel, firm level (transition economies)	1994-1999	- Positive - Direct effects (into own affiliates) are significant in five out of ten economies and larger than spillover effects - Vertical spillovers are larger than horizontal spillovers	Damijan, et al. (2001)
	Panel, industry level (35 OECD and developing economies)	1987-2002	Positive for certain industries and developing economies, particularly where FDI coincide with high-investment and export-orientation	Fillat and Woerz (2010)
	Panel, aggregate	1975-1985	Inconclusive	Aswiyono (1998)
	Panel, firm level	1986-2000	Positive effects only for FDI from the Japanese and other less-developed East Asian countries, whereas the non-Asian countries' FDI have no significant effects.	Takii (2007)
	Panel, firm level, manufacturing sector	1975-2000	Positive, particularly in labor-intensive sectors and during the post-trade liberalization period	Temenggung (2006)
	Panel, firm level	1980-1996	Negative effects for both in the pre-trade liberalization and the post-trade liberalization period	Jacob and Meister (2005)
	Panel, firm level	1995-2005	Positive effects for horizontal and forward spillovers. But, little evidence for backward spillovers.	Negara and Firdausy (2011)
	Panel, firm level	1995-2005	Positive effects for horizontal and forward spillovers. But, little evidence for backward spillovers.	Negara and Firdausy (2011)
Intra-industry or horizontal productivity spillovers*	Cross-sectional, industry level (Mexico)	1970, 1970/75	Positive	Blomstrom and Persson (1983); Blomstrom (1986); Blomstrom and Wolff (1994); Kokko (1994); Kokko (1996) Kokko, et al. (1996)
	Cross-sectional, firm level (Uruguay)	1990	Inconclusive	Chuang and Lin (1999)
	Cross-sectional, firm level (Taiwan)	1991	Positive	Kokko, et al. (2001)
	Cross-sectional, firm level (Uruguay)	1988	Inconclusive	Li, et al. (2001)
	Cross-sectional, industry level (China)	1995	Positive	Haddad and Harrison (1993)
	Panel, firm and industry level (Morocco)	1985-1989	Inconclusive	Aitken and Harrison (1999)
	Panel, firm level (Venezuela)	1976-1989	Negative	Kathuria (2000)
	Panel, firm level (India)	1976-1989	Inconclusive	Kugler (2001)
	Panel, industry level (Colombia)	1974-1998	Inconclusive	
	Panel, industry level (Colombia)	1974-1998	Inconclusive	

Table 1b. Summary of Empirical Studies on FDI Impacts in Developing Economies, continued.				
Impacts	Methodology and data	Period	Finding	Author
	Panel, firm level (Czech)	1993-96	Negative	Djankov and Hoekman (2000)
	Panel, firm level (Poland)	1993-97	Negative	Zukowska-Gagelmann (2000)
	Panel, firm level (Czech)	1995-98	Inconclusive	Kinoshita (2001)
	Panel, firm level (Hungary)	1993-97	Inconclusive	Boscho (2001)
	Panel, firm level (Bulgaria, Poland, Romania)	1993-97	- Negative for Bulgaria and Romania - Inconclusive for Poland	Konings (2001)
	Panel, firm level (8 transition economies)	1994-98	- Negative or inconclusive - Positive only for Romania	Damijan, et al. (2001)
	Panel, firm level (Mexico)	1993-1999	Negative, inconclusive	Lopez-Cordova (2002)
	Panel, firm level (Ghana)	1991-1997	Positive	Gorg and Strobl (2002)
	Panel, firm level (Lithuania)	1996-2000	Inconclusive	Smarzynska-Javorcik (2002)
	Cross-sectional, firm level	1991	Positive	Blomstorm and Sjöholm (1999)
	Cross-sectional, firm level	1980-1991	Positive	Sjöholm (1999)
	Inter-industry or vertical productivity spillovers*			
	Panel, industry level (Colombia)	1974-98	- Positive for backward spillovers. - No result for forward spillovers	Kugler (2001)
	Panel, firm level (Lithuania)	1996-2000	- Positive for backward spillovers. - No result for forward spillovers	Smarzynska-Javorcik (2002)
	Panel, firm level	1988-1996	Positive	Blalock and Gertler (2005)
Wage spillovers*	Panel, industry level (Mexico)	1984-1990	Negative	Aitken, et al. (1996)
	Panel, industry level (Venezuela)	1977-1989	Negative	Aitken, et al. (1996)
Employment	Panel, firm level, manufacturing sector	1975-2005	Positive	Lipsey, et al. (2010)
Export spillovers*	Cross-sectional, firm level (Mexico)	1986-1989	Positive	Aitken, et al. (1997)
	Panel, firm level (Uruguay)	1998	Inconclusive	Kokko, et al. (2001)
	Panel, industry level (India)	1994-2000	Positive	Banga (2003)

* Compiled from Gorg and Greenaway (2004).