Journal of Policy Options · RESDO

Technology Transfer and Economic Growth Through Foreign Direct Investment in Transition Economies

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Abstract

This study explores the impact of foreign direct investment on both economically developed and developing nations, with a particular focus on transition economies, especially in relation to technology transfer. The findings reveal a notable influence of foreign direct investment on the economic growth of developing and transition economy countries. The analysis covers inward foreign direct investment inflows between 2000 and 2018, highlighting a significant gap in existing research on the determinants of foreign direct investment, particularly concerning transition economies. While previous studies have extensively examined the factors driving foreign direct investment inflows into developed and developing countries, the specific context of transition economies remains underexplored. This paper addresses this gap by investigating the role of foreign direct investment inflows from investor nations in fostering innovation and facilitating technology transfer during the period from 2000 to 2018. The study underscores the importance of Asia as a region of interest, given its significant role in the global foreign direct investment landscape. Foreign direct investment serves as a critical conduit for the transfer of technology from developed to developing and transition economies, enabling these nations to leverage advanced technologies and drive economic growth. By analyzing the patterns and impacts of foreign direct investment inflows, this paper contributes to a deeper understanding of how foreign direct investment can be strategically utilized to foster innovation and economic development in transitioning economies. The findings suggest that foreign direct investment not only supports economic growth but also plays a pivotal role in the dissemination of technology, thereby contributing to the long-term economic advancement of recipient countries.

Keywords: Foreign Direct Investment, Technology Transfer, Transition Economies, Economic Growth, Innovation
JEL Codes: F21, O33, P33

1. INTRODUCTION

Foreign direct investment (FDI) is widely believed to play a crucial role in transferring technology from a home country to a host country. Technology transfer (TT) refers to the process through which one party in a country gains access to technical knowledge from a foreign entity and successfully integrates it into their own production processes. The role of TT in fostering economic development is well-recognized, particularly in relation to the income disparity between developed and developing nations (Parente and Prescott, 1994). To close the technological gap, developing countries must adopt new technologies at a faster pace than they emerge. In achieving this, both market forces and government policies are vital. At the core of TT lies the exchange of knowledge and information. Technology can be codified, such as in blueprints, or uncodified, like the know-how possessed by engineers. It may be embodied in products and people or disembodied in ideas or services. TT often takes place through market-based transactions between unrelated partners. However, information can also flow internationally on a non-market basis, within the boundaries of firms and joint ventures. Given the complex nature of TT, there are multiple channels through which technology crosses international borders. One significant channel is the trade of goods and services, as exports inherently carry the potential for transmitting technological information. Trade in capital goods and technological inputs can directly enhance productivity by being integrated into local production processes.

Another key channel for TT is the direct exchange of knowledge through technology licensing, which can occur within firms, between joint ventures, or among unrelated entities. However, this article focuses specifically on foreign direct investment (FDI) as a primary means of TT. In recent years, the landscape of international investment has evolved, particularly with the significant expansion of FDI from developed, developing, and transition economies. Rapid economic growth, favorable commodity prices, and liberalization efforts have driven a surge in outward investment from these groups of economies. In 2011, outward FDI from these regions reached an unprecedented $193 billion, representing 16% of global outflows—a sharp increase compared to a mere 7% share a decade earlier. This surge in FDI is especially relevant for low-income countries, as much of the investment remains within developing and transition economies. This trend presents opportunities for technology transfer that can stimulate economic growth and development in these regions. The growth of foreign direct investment (FDI) in transition economies is often attributed to the process of economic liberalization and the removal of barriers that previously restricted foreign investment. These changes have allowed transition economies to attract more than

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half of global FDI, with 29% of these investments arising from exchanges between these countries themselves. Moreover, outward FDI from transition economies has reached record levels, with a substantial portion being directed to other transition economies. This shift highlights the evolving role of these economies, not only as major recipients of FDI but also as significant sources of outbound investment (UNCTAD, 2011). Within the group of transition economies, the Commonwealth of Independent States (CIS) has only recently experienced a boom in FDI. The scale of capital inflows in the CIS region resembles the surge of FDI that Central and Eastern European (CEE) countries witnessed in the late 1990s. In those countries, FDI greatly enhanced local industries and services, contributing to substantial productivity growth. The CIS region is now experiencing a similar transformation, as increased foreign investment is beginning to spur significant economic development.

While much of the South-South FDI remains regional in nature, there are growing indications that transnational corporations (TNCs) from developing countries and transition economies are increasingly investing beyond their neighboring regions. These TNCs are expanding their operations into other transition economies, often bringing with them vital technology transfers. For example, natural-resource-based TNCs from transition economies have been expanding their presence in Africa, driven by opportunities in sectors such as mining and oil. However, technology transfer and firm-specific advantages remain crucial for further expansion of investment between these economies, particularly as competition for FDI intensifies globally. This competition is especially fierce in natural resource sectors like oil and mining, where the majority of investment between these economies is concentrated. To continue fostering growth, transition and developing economies must leverage technological advancements and other firm-specific capabilities to remain competitive in the global FDI landscape.

2. LITERATURE REVIEW

According to research on foreign direct investment (FDI), there is no singular, unified theory that fully explains FDI. Instead, a variety of theoretical frameworks, assumptions, and models exist, each contributing unique insights into the complexities of FDI. Moreover, these sub-theories are not mutually exclusive; they are interconnected, and any one theory is incomplete if considered in isolation (Faeth, 2009). To analyze FDI in the context of transition economies, it is first necessary to address several foundational questions: What defines a developed economy? What distinguishes a developing economy? And what exactly is an economy in transition? The classification of countries into developed, developing, and transition economies is typically based on various economic indicators, such as Gross Domestic Product (GDP), Gross National Product (GNP), per capita income, the level of industrialization, and the standard of living. "Developed countries" refer to sovereign states with highly advanced economies and robust technological infrastructure in comparison to other nations. These economies typically exhibit a high standard of living, advanced industrial bases, and a mature, service-oriented economic structure. On the other hand, "developing countries" are those with lower levels of industrialization and a lower Human Development Index (HDI). These nations generally face challenges related to poverty, health, and security, and they often struggle to provide the same level of infrastructure and social services as developed nations. Although developing countries are characterized by economic progress, they still experience significant disparities in income and industrial capabilities compared to their developed counterparts.

The term "economy in transition" refers to countries that are undergoing significant structural changes in their economic and political systems. These nations can be grouped into three categories, though they are not homogeneous and experienced varying conditions at the beginning of their transitions. The first group includes Central and Eastern European countries, many of which were part of the former communist bloc. The second group comprises rent-seeking countries in Africa and the Middle East. The third group includes emerging economies such as China, India, and several nations in Latin America. What these countries have in common is the collapse of their previous economic systems, the abandonment of centralized economic planning, the recognition of private property, and a shift toward integrating with Western economies. These transitions often involve profound political and economic changes, including a movement toward market-oriented policies and the dismantling of state-controlled industries. However, the level of transformation within these economies can vary significantly, and many transition economies still face challenges in fully embracing democratic governance and a free market system. Additionally, stronger regional ties within certain groups of transition countries sometimes limit their full integration into the global economy. These factors contribute to the ongoing separation of some transition economies from the broader global economic system, despite their efforts to reform and modernize. To begin, let us examine the classification of countries. For analytical purposes, the World Economic Situation and Prospects (WESP) divides all countries into three main categories: developed economies, economies in transition, and developing economies. While some countries, particularly economies in transition, may exhibit characteristics that could place them in more than one category, these classifications are made mutually exclusive for the sake of analysis. Within each broad category, subgroups may be created based on geographical location or specific criteria, such as the "major developed economies" subgroup, which is based on membership in the Group of Seven (G7).

The primary distinction between transition economies and economically advanced countries lies in the former's less-developed market institutions, unstable economic and political environments, and high levels of uncertainty. These factors create additional risks for multinational corporations (MNCs) conducting business in transition economies, necessitating careful risk management strategies. Theoretical frameworks for understanding foreign direct investment (FDI) offer insights into how multinational corporations operate in these diverse economic contexts. Coase (1937) initially laid the foundation

for understanding firm behavior, and Hymer (1960) expanded on this with a microeconomic analysis of MNCs rooted in industrial organization theory. Hymer's work focused on the motivations of MNCs to expand their operations abroad, particularly through the transfer of intermediate products such as knowledge and technology. He was among the first to distinguish MNCs as entities primarily engaged in international production rather than trade in an imperfect market. His theory also highlights key factors for transition economies, including product differentiation, managerial expertise, new technology or patents, government intervention, information asymmetry, cultural differences, and business ethics (Caves, 1996).

Another influential theory is the international product life cycle, introduced by Vernon (1966), which is based on the hypothesis of comparative advantage of factor endowments. This theory suggests that differences in resource endowments and initial economic conditions across countries explain the geographical distribution of FDI. However, Vernon's model simplifies FDI as a substitute for trade and does not adequately explain investment activities of transition economies in advanced countries. A different approach, based on empirical findings rather than existing theory, emphasizes aggregate variables as determinants of FDI. Scaperlanda and Mauer (1969), in their study of FDI in Europe, found that the size of a country's Gross National Product (GNP) significantly influences MNCs' investment decisions. Other studies have also pointed to factors such as market size, market growth, geographical distance between investor and host countries, cultural and language similarities, and trade barriers as critical determinants of FDI (Goldberg, 1972; Davidson, 1980; Lunn, 1980). Many analyses of FDI in transition economies have adopted this framework. For instance, in the context of Central and Eastern European (CEE) countries, Altomonte (1998) demonstrated that larger market sizes and greater potential demand increase the likelihood of attracting FDI. He also highlighted that the physical distance between home and host countries can influence MNCs' investment decisions. Using an empirical model of bilateral FDI flows between the European Union (EU) and CEE countries, Brenton, Di Mauro, and Liücke (1998) found that income growth and business-friendly government policies were key factors driving FDI to the region. However, the relationship between FDI and economic growth in transition economies is not always straightforward. Lyroudi, Papanastasiou, and Vamvakidis (2003), in their study of transition countries from 1995 to 1998, found no significant correlation between FDI and economic growth. This could be explained by the fact that many of these countries were experiencing similar economic crises characterized by low growth during this period. Cukrowski and Mogilevsky (2001) also argue that poorer transition economies are less likely to attract significant foreign investment, underscoring the importance of stable economic conditions and market-friendly policies in attracting FDI.While there is no singular theory that explains FDI across all contexts, various models provide valuable insights into the factors that influence investment flows, particularly in transition economies. These economies face unique challenges, such as underdeveloped institutions and heightened risks, which require MNCs to carefully assess market conditions, political stability, and economic policies when making investment decisions.

The theory of Internalization of FDI, as proposed by Dunning (1988), suggests that firms choose to internalize transactions when the costs of conducting these transactions on the open market exceed the costs of doing so within the firm. This approach is especially relevant in the context of foreign direct investment (FDI), where firms establish operations in a host country because it is more profitable to produce there than in the home country and then export the goods. Several factors contribute to this profitability, such as the availability of raw materials, lower labor costs, favorable tax structures, or tariffs (referred to as Location advantages). Furthermore, firms may choose FDI over other arrangements, such as licensing or joint ventures, if it is more beneficial to retain control over production and technology (Internalization advantage). This allows firms to capitalize on their proprietary knowledge or skills without sharing them with external partners. Dunning was also the first to apply these principles to transition economies, highlighting that the structure of resources, market size, and government policies are key determinants of where FDI is directed. He argued that the patterns of FDI are not fixed but fluctuate based on these factors, reflecting the dynamic nature of global investment flows. Transition economies, in particular, offer unique opportunities and challenges for multinational companies, as their evolving market conditions and government policies directly influence the attractiveness of FDI. Theoretical explanations of FDI are deeply rooted in international trade theory, particularly the concept of comparative advantage, which emphasizes differences in factor endowments between countries. Multinational corporations (MNCs) are typically drawn to countries that offer specific comparative advantages, such as lower production costs, resource availability, or access to new markets. FDI represents a long-term commitment by a company to another country, often involving participation in management (Zhang, 2001), joint ventures, and the transfer of technology and expertise.

Damooei and Tavakoli (2006) identify two types of FDI: inward FDI and outward FDI. Inward FDI refers to investments made by foreign entities into the domestic market, while outward FDI involves domestic firms investing in foreign markets. The net result of these two types of FDI is reflected in the net FDI inflow, which can be positive or negative, depending on whether a country receives more FDI than it sends out. For an investment to qualify as FDI, the parent company must hold at least 10% of the ordinary shares of its foreign affiliates, or exert significant control over the foreign enterprise through voting power (Sharma and Gani, 2004). This threshold distinguishes FDI from other forms of international financial investments, emphasizing the strategic and managerial involvement of the investing firm in the foreign market. The theory of Internalization of FDI explains why firms choose to produce in foreign markets rather than engage in market-based transactions like exporting or licensing. Factors such as cost advantages, market size, and government policies play a critical role in determining the location of FDI, particularly in transition economies where these factors are often in flux. The long-

term nature of FDI, which involves active participation in management and control, distinguishes it from other forms of investment and highlights its importance in global economic integration.

3. METHODOLOGY

The paper utilized secondary sources of information, drawing on a wide range of reputable global databases and reports. Key data sources included the World Investment Report by the United Nations Conference on Trade and Development (UNCTAD), the State Statistics Service of the EU, business reports, and industry newsletters and publications. The study specifically focuses on the factors (determinants) influencing inward Foreign Direct Investment (FDI) from 2005 to 2016. A comparative method was employed to analyze the collected data and materials, allowing for a thorough examination of trends across different periods and regions. Additionally, the article relied on data prepared by the Development Policy and Analysis Division (DPAD) of the Department of Economic and Social Affairs (UN/DESA) of the United Nations Secretariat. The analysis was further supported by data from the UN/DESA Statistics Division and Population Division, as well as from the five United Nations regional commissions. Other critical sources included the United Nations Conference on Trade and Development (UNCTAD), the United Nations World Tourism Organization (UNWTO), the International Monetary Fund (IMF), the World Bank, the Organization for Economic Cooperation and Development (OECD), and various national and private sources. These diverse data sets provided a solid foundation for the analysis, enabling a comprehensive assessment of the determinants of inward FDI during the specified period.

4. EMPIRICAL DISCUSSION

Many countries, particularly developing ones, now see attracting foreign direct investment (FDI) as a central component of their economic development strategies. This is likely because FDI is viewed as a comprehensive package that includes capital, technology, marketing expertise, and management skills. For developing countries, FDI is especially crucial, as it provides access to resources that might otherwise be unavailable, contributing significantly to their economic growth. The advantages of FDI, such as the inflow of technology, access to capital, and managerial expertise, are highly beneficial for both the country and the region (Genet A., et al., 2005). The availability of abundant or low-cost production factors in a developing country serves as a strong incentive for transnational corporations (TNCs) to establish a presence. Historically, natural resources have been the primary factor attracting foreign investors, particularly during the first wave of globalization, when colonial powers invested heavily in their colonies to extract resources for use in their home countries. Today, natural resource-seeking remains a dominant motivation for TNCs in sectors such as mining, mineral extraction, and large-scale agriculture. Developing countries rich in natural resources, especially the least developed ones, are often targeted by TNCs seeking to meet their raw material needs, supply host or international markets, or secure strategic minerals for their home countries (OECD, 2008; UNCTAD, 2011).

Another key motivation for FDI is the pursuit of human resources, particularly in developing countries where labor is relatively inexpensive. Human resource-seeking FDI is driven by the cost of labor in relation to its level of skill and qualifications. In addition to natural resources, the availability of skilled but low-cost labor is becoming an increasingly important factor for foreign investors. TNCs often respond to rising wage pressures in their home countries by shifting labor-intensive production processes to developing nations, making this type of FDI closely related to the efficiency-seeking motive. In manufacturing sectors within developing countries, where import substitution and related policies restrict direct exports from the home country, market-seeking FDI becomes important for accessing local markets for processed goods. However, since the 1980s, many developing countries have liberalized their import regimes, giving TNCs the option to either export or invest directly. Market-seeking FDI is still prevalent, particularly in service industries that have opened up to foreign investment. Other factors that drive market-seeking FDI include high transport costs, differences in consumer preferences, and the overall size of the host economy.

Efficiency-seeking FDI is focused on improving competitiveness beyond the mere reallocation of labor. This type of investment seeks to leverage factors such as low labor costs, the availability of skilled workers, and access to international markets. Efficiency-seeking FDI often involves creating new sources of competitive advantage for firms by utilizing inexpensive labor for production or capitalizing on a country's educated workforce. This form of investment can manifest in various ways, such as firms in developing countries supplying fully manufactured products to TNCs or foreign enterprises adapting products to meet local tastes and quality requirements. Efficiency-seeking FDI often targets larger or more economically advanced developing countries through mechanisms like Greenfield investments. Another significant type of FDI is strategic asset-seeking, where firms invest abroad to acquire assets such as technology, marketing, and managerial expertise available in the host country. Strategic asset-seeking FDI is popular in medium-income and fast-industrializing countries, as firms seek to quickly establish a presence in innovative and dynamic markets (Dunning, 1993). Developing countries can enhance their attractiveness to this type of FDI by investing in human resources and infrastructure (OECD, 2008). In the contemporary global economy, nearly all countries actively pursue FDI, anticipating favorable outcomes in the form of capital inflows, advanced technology, management expertise, and market knowledge. The key determinants of FDI, especially the role of national policies and the liberalization of these policies, are central to the globalization process. Location-specific determinants, such as natural resources, labor costs, and the ease of doing business, heavily influence a host country's ability to attract FDI. The importance of these determinants depends on several factors, including the motive

for investment (e.g., resource-seeking, market-seeking, or efficiency-seeking), the type of investment (e.g., services or manufacturing), and the size of the investors (small and medium MNEs or large MNEs).

Traditional determinants of FDI, such as the cost of transferring goods between locations, infrastructure quality, business regulations, and the availability of skilled labor, continue to play a critical role (UNCTAD, 2011). Countries like China, Australia, and Kazakhstan still rely on natural resources and large markets to attract FDI. Additionally, the relative importance of location determinants is shifting toward combinations of competitive wages, skills, and productivity. While low-cost labor remains attractive, investors increasingly seek efficiency and productivity gains in FDI decisions. Technology transfer through FDI occurs via multiple channels, with foreign direct investment serving as a formal, market-mediated channel. Multinational enterprises (MNEs) are expected to introduce newer and more productive technologies to their subsidiaries in host countries, contributing to the transfer of international technology (Maskus E. et al., 2003; Wie Thee Kian, 2005).

FDI has become one of the main drivers of globalization, reflected by its increasing importance in the world economy. While global trade continues to be significant, FDI flows have surpassed trade volumes in some regions. A moderate recovery in FDI flows to developed economies was expected in 2017, driven by accelerating economic growth, a strong stock market performance, and a rebound in world trade volumes (UNCTAD, 2017). After a decline in global FDI flows in 2016, inflows were forecast to increase by about 5% to nearly $1.8 trillion in 2017, although geopolitical risks and policy uncertainties posed potential challenges. In 2016, global FDI flows declined by 2%, to $1.75 trillion, with developing economies experiencing a 14% drop in inflows to $646 billion. However, developed economies saw a 5% increase, primarily driven by North America. Transition economies, particularly those in Eastern Europe and Central Asia, witnessed a remarkable 81% rebound in FDI flows to $68 billion. FDI outflows also exhibited regional variations, with developed economies accounting for more than 70% of global FDI. Outflows from developing economies remained steady, with Asia seeing a 7% increase due to record investments from China. Conversely, transition economies experienced a 22% decline in outward FDI, reaching their lowest level since 2005. In structurally weak, vulnerable, and small economies, FDI inflows fell at different rates. Least developed countries (LDCs) saw a 13% drop, while landlocked developing countries (LLDCs) experienced only a marginal 2% decrease. Small island developing states (SIDS) saw a 6% reduction in FDI flows, reflecting the varying challenges faced by these economies in attracting investment.

5. CONCLUSIONS

This study investigates the impact of foreign direct investment (FDI) on technology transfer across developed economies, developing countries, and transition economies. The findings indicate that, despite the potential of FDI to facilitate technology transfer, the inflow of FDI into developing and transition economies has not been sufficient to generate the expected levels of technology transfer. This shortfall in FDI inflows has limited the ability of these economies to fully absorb and integrate advanced technologies, which is crucial for their industrial growth and economic development. As a result, the anticipated benefits of technology transfer through FDI have not been fully realized in these regions, highlighting the need for more targeted efforts to attract and leverage FDI for technological advancement. It is argued that FDI offers multiple benefits to host countries beyond the infusion of much-needed capital for domestic investment. FDI helps create employment opportunities, facilitates the transfer of managerial skills, and drives the adoption of new technologies, all of which are essential components of economic development. Given these significant advantages, there is widespread acknowledgment of the need to cultivate a favorable environment to attract FDI, which, in turn, contributes to sustainable economic growth. However, the global market for FDI is highly competitive, with countries vying to position themselves as attractive destinations for investment. This underscores the importance of implementing policies that not only draw foreign investors but also ensure that the economic benefits of FDI are maximized for national development. Developing economies should leverage foreign direct investment (FDI) as a tool to share and access innovation and technology resources, thereby boosting their own capacity for innovation. A growing trend in the internationalization of research and development (R&D) by multinational enterprises (MNEs) is leading many companies to establish R&D institutions abroad, promoting localization and integration into host economies. By attracting these multinational R&D facilities, host countries can effectively incorporate global R&D resources into their national innovation systems. This allows them to make full use of advanced technology, benefit from the spill-over effects, and foster collaboration in R&D. Such initiatives would significantly aid developing and transition economies in enhancing their indigenous technological innovation capabilities, creating a pathway to sustainable growth and competitiveness in the global market. By building stronger ties with multinational R&D operations, these economies can accelerate their technological development and improve their position in the global innovation landscape.

REFERENCES

Agreement on Trade-Related Aspects of Intellectual Property Rights. Accessed 24 November 2017.

Altomonte, C. (1998). FDI in the CEECs and the Theory of Real Options: an Empirical Assessment. Licos Discussion Paper. No. 176.

Brenton, P.P., DiMauro, F., & Lucke, M. (1998). Economic integration and FDI: An empirical analysis of foreign investment in the EU and in Central and Eastern Europe. *Kiel Working Papers 890*. Kiel Institute for the World Economy.

Caves, R. (1996). *Multinational Enterprise and Economic Analysis*. Cambridge: Cambridge University Press.

Chia, S.Y. (1993). Foreign direct investment in ASEAN economies. *Asian Development Review*, 60–102.

Chia, S.Y. (1997). Singapore: Advanced production base and smart hub of the electronics industry. In W. Dobson & S.Y. Chia (Eds.), *Multinationals and East Asian Integration* (pp. 31–61). International Development Research Centre.

Coase, R. (1937). The nature of the firm. *Economica, 4*(16), 386-405.

Cukrowski, J., & Mogilevsky, R. (2001). The role of macroeconomic stabilization in attracting foreign investment in the Kyrgyz Republic. *Studies and Analyses No. 222*, 30.

Damooei, J., & Tavakoli, A. (2006). The effects of foreign direct investment and imports on economic growth: A comparative analysis of Thailand and The Philippines. *Journal of Developing Areas, 39*(2), 79-100.

Davidson, W.H. (1980). The location of foreign direct investment activity: Country characteristics and experience effects. *Journal of International Business Studies, 11*(2), 9-22.

Dunning, J.H. (1988). The Eclectic Paradigm of International Production: A Restatement and Some Possible Extensions. *Journal of International Business Studies*, 1-31.

Faeth, I. (2009). Determinants of foreign direct investment – A tale of nine theoretical models. *Journal of Economic Surveys, 23*(1), 165-196.

Genet, A., et al. (2005). Determinants of Foreign Direct Investment in Ethiopia: A time-series analysis. Addis Ababa: University of Westminster.

Goldberg, M. (1972). The Determinants of U.S. Direct Foreign Investment in the EEC: Comment. *American Economic Review, 62*, 692-699.

Hymer, S. (1976). *The International Operations of National Firms: A Study of Direct Foreign Investment*. MIT Press.

Kakazu, H. (1990). Industrial technology capabilities and policies in selected Asian developing countries (with particular emphasis on transferred technology). *Asian Development Bank Economic Staff No. 46*. Manila: Asian Development Bank.

Markusen, J.R. (1995). The boundaries of multinational enterprises and the theory of international trade. *Journal of Economic Perspectives, 9*, 169-189.

Parente, S.L., & Prescott, E.C. (1994). Barriers to technology adoption and development. *Journal of Political Economy, 10*, 298-321.

Scaperlanda, A.E., & Mauer, L.J. (1969). The determinants of U.S. direct investment in the EEC. *The American Economic Review, 59*(4), 558-568.

Sharma, B., & Gani, A. (2004). The effects of foreign direct investment on human development. *Global Economy Journal, 4*(2), 9.

Vernon, R. (1966). International investment and international trade in the product cycle. *The Quarterly Journal of Economics, 6*, 190-207.