Chapter-II

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To explain the nature, causes and possible socio-economic consequences different thinkers have propounded different theories over a long period of time. Among others, these include the neo-classical theory of capital mobility, the industrial organisation approach, the transaction cost or the internalisation theory, eclectic theory of Dunning and macroeconomic theory by Kojima have been discussed in this study. This chapter delves into the theoretical framework of foreign direct investment and trade an inroad into the Hungarian economy to see the viability of any of the theory dealt here in.

The market imperfections approach and industrial organisation

Hymer, Kindleberger and Caves have propounded the market imperfections approach. The theory starts with the basic assumption that without market imperfections foreign direct investment would never occur. Market imperfection can be caused by goods and factor markets, scale economies, and Government imposed regulations, especially tariff and trade barriers that prevent the efficient allocation of resources and distribution of products. In a perfect market, the only vehicle needed to serve a foreign market is international trade.

It has been recognised that foreign direct investment is far different from portfolio investment. In the first place, foreign direct investment is more than just the transfer of capital. It is the transfer of a package of assets that includes technology, managerial skills, and access to international markets. Second, there is no change of ownership in the process. Multinational Enterprises (MNEs) internalise the market by directly controlling the resources acquired through foreign direct investment. As such, portfolio capital theory, which is based on the interest rate, is insufficient to explain the movement of direct investment.

If an MNE intends to pursue foreign value added activities, it is perceived to face some disadvantages in comparison with indigenous firms, e.g. the information cost concerning the operation of firms within a foreign social, institutional, and political system. To overcome the inherent disadvantages of owing international production, MNEs must possess some kind of ownership advantages. These perceived ownership advantages could be expressed as technology, cost effectiveness, established markets and financial strength.

Different scholars like Horst, Caves and Lall have explored about the characteristics of a firm and the kind of industries MNEs are inclined to engage in the process of production.\(^\text{34}\) It was found that ownership specific advantages usually rest on intangible assets created by large firms with intensive research and development activity. This points to the high technology industries such as chemicals, pharmaceuticals and instruments. Industries in mature oligopolies with higher seller concentration and higher

barriers to entry also tend to play an important role in international production. This
theory is important in order to have an understanding of the characteristics of foreign
direct investment. The theory also clarified the different advantages accrued to the
investor in terms of a destination. In this study the theory tried to establish why the
countries such as Hungary and Poland has chosen as case study against other nation of
the transition economies. It helps in understanding the locational mechanism of foreign
direct investment. By this process it seeks to establish how an MNE make a choice out of
an environment comprises of multitude of responses to a particular problem.

Product Cycle Theory

Raymond Vernon's product cycle model is an integrated model for international
trade and investment. Three basic assumptions are made in Vernon's product cycle
hypothesis. The fact that new products constantly appear, then mature, and eventually die
has always fitted awkwardly into the mainstream theories of international trade and
international investment. Hume, Ricardo, Marshall, Ohlin, Williams, and others have
observed the phenomenon in passing, without attempting any rigorous formulation of its
implications for international trade and investment theory. In the past decade or two,
however, numerous efforts have been made to fill the gap. Some have dealt mainly with
the trade aspects, tracing out a pattern that eventually culminated in foreign direct
investments on the part of the innovating firm.

According to the product cycle hypothesis, firms that set up foreign producing
facilities characteristically do so in reliance on some real or imagined monopolistic

35 Tao Qu and others, n. 1.
advantage. In the absence of such a perceived advantage, firms may not be willing to bear on the special costs and uncertainties of operating a subsidiary in a foreign environment.

The product cycle hypothesis begins with the assumption that the stimulus to innovation of firm is typically provided by some threat or promise in the market. But according to the hypothesis, firms are acutely myopic; their managers tend to be stimulated by the needs and opportunities of the market closest at hand, the home market.

The home market in fact plays a predominant role in the hypothesis. Not only is it the source of stimulus for the innovating firm; it is also the preferred location for the actual development of the innovation. The first factor that has pushed innovating firms to do their development work in the home market has been simply the need for engineers and scientists with the requisite skills. When the innovative firm realises the requirement of these skills it tends to rule out location in most developing countries and has narrowed the choice to other location in the advanced industrialised world. As between such advanced country sites, the home market has generally prevailed. Locating in the home market, engineers and scientists can check constantly with the specialists at headquarters those concerned with financial and production planning.

The propensity to cluster in the home market is fortified by the fact that there are some well-recognised economies to be captured by an innovating team that brought together at a common location. These include the usual advantage that go with subdividing any task among a number of specialists, and the added advantages of maintaining efficiency of communication among the research specialist.

36 Ibid.
The upshot is that the innovation of firms placed in some given market tends to reflect the characteristics of that market. Historically, therefore, US firms have developed and produced products that were labour-saving or responded to high-income wants. Continental European firms produced the products and processes that were material-saving and capital-saving whereas the Japanese firms produced products that conserved not only material and capital but also space.

If innovating firms tend to scan their home markets with special intensity, the chances are greatly increased that their first production facilities will also be located in the home market. In many cases, the transitions from development work to pilot plant operation to first commercial production take place in imperceptible steps. But other factors also figure in the choice. One is the fact that if the firm perceives its principal market as being at home, it may prefer a home location to minimise transport costs. The second factor is that the specification for new products and the optimal methods for manufacturing such products are typically in flux for some time. Hence, fixing the optimal location of the first production site is bound to be an exercise based on guesswork.37 A final factor that may explain the tendency to produce at home is the characteristic inelasticity in thought to make the innovator relatively indifferent to questions of production cost at the time of introduction of a new product.

Once the innovator has set up its first production unit in the home market, any demand that may develop in a foreign market would ordinarily be served from the existing production unit. Eventually, however, the firm may consider other alternatives,

such as that of licensing a foreign producer or of setting up its own producing subsidiary abroad. For new products, the licensing alternative may prove an inferior choice because of inefficiencies in the international market for technology. If licensing is not the preferred choice, then the firm makes the usual familiar comparison between the delivered cost of exports and the cost of overseas production. That is the marginal costs of producing for exports in the home unit plus international transport costs and duties are compared with the full cost of producing the required amount in a foreign subsidiary.

In the product cycle hypothesis it is commonly assumed that a triggering event is likely to be required before the producer would seriously make the calculation that could lead to a creation of foreign producing facility. The triggering event ordinarily occurs when the innovator is threatened with losing its monopoly position. In the usual case, rival producers appear and prepared to manufacture the product from locations that could undersell the original innovator. Here the question arises as to why the original innovator would not speculate about the probability of a declining cost of production abroad. One part could be the indeterminateness of the threat before it has actually materialised. The difficulty of deciding what is at stake failing to find the least-cost combination, what alternative sites to be investigated, and what the cost of investigation are likely to be.

Change in these conditions, however, acts as the threat and begins to crystallise the problem. Eventually, it may be clear that the innovator is threatened with the loss of its business in a given foreign market. At that point, the areas to be investigated as possible production sites have been narrowed while the size of the risk has been more explicitly defined. Accordingly the decision of whether to invest or not depends upon

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38 Peter Buckley, n. 4, p. 258.
readily available information. Once having felt compelled to focus on the issue, the innovator would decide in some cases to set up a local producing unit in order to prolong some of the advantages that were created by its original monopoly.

Internalisation Approach

The internalisation approach offered by Buckley and Casson represented a distinct shift from the market imperfection approach in that MNEs are approached within the context of the theory of the firm that is known as the economics of internal organisation.\textsuperscript{39} It is a fact that the modern business sector carries out a series of interrelated economic activities that form a value-added chain. Between the two modes of transaction – market and hierarchy- it is often found that the latter is superior to the former in organising the intermediate products due to market imperfections. The cost efficiency of exchange and transaction through a hierarchy urges firms to bypass the market and create an internal market that brings the intermediate product markets and production under common ownership and control. Such MNEs are the result of the process of internalisation of markets across national boundaries.

The Eclectic Paradigm

Dunning’s eclectic approach represented the state of the art in explaining international production.\textsuperscript{40} The eclectic approach has been different from other theories of foreign direct investment, which examined foreign direct investment from different specific perspectives. For example, the market imperfections approach explains why

\textsuperscript{39} Ibid.
\textsuperscript{40} John H. Dunning, ed. The Theory of Transnational Production, (London, 1993), p. 64.
international production happens and what ownership specific advantage MNEs possess. The internalisation approach being based on the theory of the firm that explains the ownership characteristics of international production. The eclectic approach, however, represented the most recent theoretical endeavour to bring these alternative perspectives together within one framework. Yet, the eclectic paradigm is not just a simple compiling of different strands of theories. Each alternative theory is brought to explain both the location and ownership characteristics of international production. As Dunning puts it, ‘the theory of the determinants of MNEs activity must then seek to explain both the location of value-adding activities, and the ownership and organisation of these activities’. 41

The basic hypothesis of the eclectic paradigm is that international production only occurs when there is a juxtaposition of three types of advantages related to a specific firm: ownership-specific advantages (O), location-specific advantages (L), and market internalisation advantages (I). 42 This produces ‘OLI’ as an abbreviation for the eclectic paradigm.

The first condition of international production has been adopted from the market imperfection approach that an MNE must possess some ownership advantage. These advantages largely take the form of intangible assets that can be manifested in technology, product differentiation, and managerial skills. As for the source of these advantages, Dunning borrows the idea first espoused by Raymond Vernon i.e. firm specific advantages originates from the process of serving home country markets. In

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41 Ibid, p. 66.
42 John H. Dunning, n. 8.
other words, it is the home country’s endowments and market characteristics that cause firm specific advantages. Although these firm specific advantages were linked to location-specific endowments during the process of their creation, they are not confined to a specific location or to a specific user once they are created. However, they may still be exclusive and specific to the firm that creates them. With this kind of impact that country-specific characteristics can exert on MNEs in mind, Dunning, however, disagreed in generalising the international production. To him international production varies from one country to another even both have similar characteristics.

A second necessary condition for international production is the presence of location specific advantages in host countries. International production will not occur if it is unprofitable to use at least one factor input with a firm’s ownership advantages. Here the relevance of location theory in international production is acknowledged, as is the pervasiveness of uneven distribution of both resources and markets.

Even with O and L advantages, international production would not occur if it were not for the advantages of internalising the use of O advantages. It is here that the theory of firm and the internalisation approach to international production come into play in Dunning’s OLI paradigm. MNEs enter to the field production only when it is beneficial to exploit the O advantages themselves rather than relinquish them to the markets.
Macroeconomic approach

The macroeconomic approach has been identified with Kiyoshi Kojima. It is stated that the flow of foreign direct investment originates from the comparative disadvantages of home countries and the comparative potential advantages of host countries regarding certain industries. Kojima calls it 'the principle of DFI (direct foreign investment) originating in the marginal industry'.

Kojima’s macroeconomic approach can be distinguished from other approaches in several aspects. First, it intends to integrate international trade and foreign direct investment. Second, due to its foundation from comparative advantages, it has been more flexible and all embracing. While other approaches discuss most issues in absolute terms, the macroeconomic theory of foreign direct investment approaches relevant issues in a comparative fashion between one country and another. While there is usually only one industry within the framework of other theories, the macroeconomic approach embraces at least two commodities or industries, which is typically shown by the international trade model.

Third, the industries seeking for foreign direct investment identified by macroeconomic approach are trade-oriented and complement each other rather than hinder international trade. As these industries are usually marginal industries in home countries, the production of these industries in host countries will lead to the import of

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new products from host countries. This is directly contrary to other approaches that identify foreign direct investment originating from industries with oligopolistic advantages that essentially are anti-trade-oriented. Fourth, the notion of marginal industry can be readily substituted with marginal production without any necessary modification and losing its explanatory power. It sounds more flexible in this sense.

The macroeconomic approach to foreign direct investment tends to explain the function of FDI under different economic environment and focuses on its future trend than to the present form. This theory also tends to perpetuate the dependent relationships that developing countries have on developed countries. Buckley and Casson pointed out that when it comes to the foreign direct investment from home country perspective and that are experiencing structural transformation, the macroeconomic approach may be more appropriate than others in explaining the characteristics of the outflow of foreign direct investment. 44

The study based on the above theories has been clarified and examined in light of the impact of FDI on the host country. The impact has been examined from both the demand and supply side view as well.

44 Peter Buckley, n. 4, p. 327.
Economic Impact of FDI: Supply Side View

In theory, the impact of host country can be realised in two ways. First, FDI may affect the supply of productive resources including financial capital, equipment and machinery, technology, management expertise and labour training. Second, it can influence the aggregate demand of the host country through initial investment demand and subsequent input demand.

Both the classical and neo-classical economic theories explain economic growth and development in terms of the stock of productive resources available for an economy and the utilisation of these resources. The productive resources include capital, labour, technology, management skills and natural resources. According to Ricardo’s classical theory of growth, an increase in capital and labour would result in growth of output. In the Harrod-Domar Model of growth, the change in capital stock (investment) and incremental capital-output ration (ICOR)\textsuperscript{45} determine the growth of national income. For a given ICOR, an increase in investment will lead to an increase in income (output). Accordingly, for a given amount of capital, the income is determined by marginal capital productivity (the inverse of ICOR).

In Solow’s new-classical model, economic growth is not only determined by the stock of capital and labour but also by the capital-labour ratio.\textsuperscript{46} If capital increases faster

\textsuperscript{46} Ibid.
than the increase in labour, the capital-labour ratio will increase the result in a growth of labour productivity. The modern theories of economic growth extend the analysis of factors contributing to economic growth, with technology and exports also being included in economic growth models. Technological progress, capital deepening, export expansion, and rational management and development strategies are believed to be critical factors influencing economic growth.

Many development economists argue in the context of developing countries that economic development is restrained by the shortage of capital (both financial and physical), technology, skilled labour, management expertise and foreign exchange. The shortage of these productive factors causes the bottlenecks in economic development of the economies in transition and the developing countries as well. Removing these shortages or bottlenecks, it is argued, is the key for these countries to achieve economic growth and modernisation.

Based on the economic growth the development theories, economists, including Steve Chan and Michael P. Todaro proposed that FDI might positively affect the economic growth of developing countries through the following channels. First, FDI may positively contribute to the capital formation of the host country. FDI, as a type of foreign capital inflow, represents an addition to the domestic savings of the host country. All other things being equal, this will augment the financial resources available for the domestic investment of the host country. Moreover, FDI may bring advanced equipment

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47 For detail see Haishun Sun, n. 10.
and machinery to the developing host country of finance the importation of capital goods that cannot be produced in the host country, thereby contributing to its capital formation.

However, the relationship between FDI and domestic investment by the host country is inconclusive. Haisun Sun argued that FDI could stimulate, supplement or displace indigenous investment financed by domestic savings. If FDI improves infrastructure in the host country and creates good investment conditions or opportunities, it tends to promote domestically financed investment. Furthermore, the addition of foreign capital may also relieve pressure on the rate of interest charged in capital markets in the host country, and provide an incentive for domestic investment.

Nevertheless, FDI may displace indigenous investment in the host country. If FDI is financed from the local financial market and results in a higher interest rate, it may crowd out domestic investment. The crowding out may also occur in factor and commodity markets. If foreign investors compete with local firms for use of scarce resources, such as import licenses, skilled manpower and credit facilities, the supply of these scarce resources will decrease for local firms. Likewise, if foreign investors tend to sell their products in the domestic markets and gain an increasing market share, local firms could be crowded out from the industry or at least have to shrink their production. Besides, foreign investors may foreclose investment opportunities for local investors based on their technology advantage and market power. Therefore, the net impact of FDI on capital formation in the host country depends upon its effect on the domestically financed investment.

Haishun Sun, n.10, p.13.
FDI may promote productivity of the domestic sector of the host country through technology transfer and the training of local labour, technicians and management personnel. Many economists agree that FDI-induced technology progress, transfer and diffusion are the most important contributions of FDI to the economy of the host country. It is widely believed that the new forms of FDI, especially joint ventures, facilitate the transfer and diffusion of technology in the host country.

In addition, through the forward linkage effect, foreign-invested enterprises (FIEs) supply equipment, machinery and other intermediate products to domestic firms. As the availability of these inputs increases, the production of domestic firms can be stimulated. In addition, the products made by FIEs may also substitute for imported products, thus helping the host country to alleviate reliance on imports and thereby to reduce any trade deficit.

Finally, FIEs are seen to contribute to the host Government's tax revenue. However, the net contribution depends on whether the tax revenue paid by FIEs is larger than the expenditure by the host government for establishing and improving infrastructure for FDI. In this regard, transfer pricing manipulated by MNEs in order to avoid tax is an important factor affecting the host country's tax revenue.

**Economic Impact of DFI: Demand-Side View**

In practice, economic growth in a country depends not only on its productive capacity, but also on the extent to which that productive capacity is actually utilised, together with the strength of demand. An increase in any component of aggregate
demand will lead to a rise of the GDP and income level. FDI may contribute to the economic growth of the host country through positively affecting aggregate demand.

In addition to the initial investment demand, subsequent demand by foreign-invested enterprises for inputs of production is even more important. When MNEs make direct investment and establish production subsidiaries in the host country, they need to employ local labour and management personnel and pay them wages and salaries. The employment creation by FDI is important for many developing host countries where the rates of unemployment and underemployment are high. It provides not only income to employees and thus additional savings to the host country, but also helps improve labour productivity of traditional sectors (such as agriculture) by absorbing underemployed or surplus labour from these sectors.

Another important demand-side impact of FDI is its backward linkage effect on the domestic sectors of the host country. Through buying locally made materials and intermediate products, foreign-invested enterprises can create additional demand for products made by local firms. The initial FDI-generated demand will induce multi-rounds of subsequent demand through industrial backward linkage effects. Domestic suppliers will be stimulated to produce more output. As a result, the growth of the entire economy will be encouraged by the increased aggregate demand initiated by FIE’s local purchases.

Furthermore, FDI, especially export-oriented FDI, promotes the exports of the host country. Taking advantage of an abundant and cheap labour resource in the host country, together with their own marketing channels and expertise, foreign-invested
Enterprises are able to expand export of their products. In addition, by using locally made materials and intermediate inputs, FIEs tend to promote exports from domestic firms as well. Export expansion, as an important indicator of economic competitiveness, directly stimulates economic growth and improves the industrial efficiency of the host country.

In practice the impacts of FDI on the supply and demand sides are intermingled rather than separate. The impact and scope of FDI on the host economy could be classified into macroeconomic and microeconomic perspectives. The former refers to the impact of FDI on the macroeconomic variables, such as GDP growth, total fixed investment, employment, exports and imports, aggregate consumption, government expenditure and tax revenue. The latter concerns the impact of FDI on the economic behaviour of individual units including firms and family. For instance, the influences of FDI on the labour productivity and technical and managerial efficiency of a domestic firm are microeconomic impacts of FDI.

While some impacts of FDI can be quantitatively measured, others cannot be directly measured. For instance, the effects of FDI on GDP growth, capital formation, employment, exports and government tax revenue are measurable, whereas the effects on technology transfer and diffusion efficiency, environmental pollution, access to foreign markets and demonstration effects are difficult to quantify.

There are various reasons for the difficulty in measuring these impacts. Some economic variables are affected simultaneously by multiple factors, including political, cultural and economic factors, and it is difficult to separate one factor's effect from that of others. Income distribution, industrial structure change, environmental pollution and
After 1989 the economies in the Eastern European region opened up various sectors to international trade. This opening up could be traced its root to the macroeconomic model of Kojima. West European enterprises and so also the US enterprises were invited to invest in different sectors of the economy except that of the strategic sectors. The foreign investors found the region conducive due to its huge market potential. To accommodate the foreign investors in their bid to obtain the benefits of FDI, Hungary and Poland offered several incentives. Institutional arrangements were made to facilitate the inflow of foreign capital into the region. However, the macroeconomic model of Kojima has become hazy in light of the liberalisation process but certainly the model acts as the principal structure on which based the openness.

The institutional arrangements and necessary legal enactment made over a long period of time has been analysed in the next Chapter and it justified the need for such measures in light of Hungary and Poland’s openness to world economy.